

Ε.13040



A PERSONAL NARRATIVE™
OF THE DISCOVERY OF THE
NORTH-WEST PASSAGE;

WITH *Illustrations*
INCIDENTS OF TRAVEL AND ADVENTURE

DURING NEARLY FIVE YEARS' CONTINUOUS SERVICE IN THE ARCTIC REGIONS
WHILE IN SEARCH OF THE
EXPEDITION UNDER SIR JOHN FRANKLIN.

BY ALEX. ARMSTRONG, M.D., R.N.

FELLOW OF THE ROYAL GEOGRAPHICAL SOCIETY;
LATE SURGEON AND NATURALIST OF H.M.S. 'INVESTIGATOR'

PUBLISHED WITH THE SANCTION OF
THE LORDS COMMISSIONERS OF THE ADMIRALTY.

LONDON:
HURST AND BLACKETT, PUBLISHERS,
SPONSORS TO HENRY COLBURN,
25, GREAT MARLBOROUGH STREET.
1857.

The right of Translation is reserved

LONDON :

Printed by Schuch and Co., 12, Poland Street.

—Beet in the Pack—Operations for our Release—Blasting—Critical Situation—Our Escape—Reach the Shore—Ship's Safety again threatened—State of Ice—Operations by Blasting and Results—Open Water—Incidents—State of Ice . . . 412—436

CHAPTER XVII.

Weather—Favourable State of the Ice and Water—Preparations to start—An Opportunity lost and Results—Departure from the Floe—Progress and Retreat—Currents—Ice in Motion—Critical Position—Pressure—Its Effects—Point Colquhoun—Progress and Incidents on the 20th—Drifting—Perils—Drifting—Cape Wrottesley—Position—Cape Austin—Difficulties—Ship secured—Cape Crozier—Prospects—Geological Character of Coast—Inferences—Dangerous Character of the Coast—Progress on the 23rd—Incidents—Weather—An Ice Barrier—Our Passage through it—Aspect of Evening—Ship on Shore—Measures adopted—Their Success—Fortunate Escape—The Night . . . 437—460

CHAPTER XVIII.

Position on 23rd September—Resolution adopted—Enter the Bay of Mercy—Error in doing so—Reasons advanced for entering the Pack—Reflections—Results of our Voyage—A Second North West Passage discovered—Dismantle Ship—State of the Ice—Reduction of Provisions—Observations on Polar Day—Necessity of large allowance of Food—State of the Ship—Cold between Decks—Party despatched to the North and their return—State of Ice—Large Expanse of Water seen—Our inability to enter it—Pleasing Intelligence—First Reindeer killed—Evidence of Game on the Land—Remarks on Reindeer . . . 461—482

CHAPTER XIX.

The Hunting—Incidents of Sport—Wolves—A Night Adventure—Return of Shooting Parties—Produce of the Chase—Its Salutary Effects—Inspection of the Crew—Weather—Lightning—Change of Temperature—Departure of the Sun—Winter Preparations—Occupations—Arctic Currency—Barometric Changes—Weather—December Gale—Christmas Day . . . 483—495

CHAPTER XX.

First day of 1852—Health of the Crew—Appearance of Reindeer—One killed—An Incident of Sport and Results—Return of the Sun—Incidents and Events—Absence of three Men—Fears entertained—Their return—Reindeer Hunting—Its Hardships and Difficulties—Sanitary State in April—Adventure with Wolves—Departure of a Party for Melville Island—Incidents—Appearance of Scurvy—Weather—Return of the Party—Their Journey and Results—Disappointment—State of the Ice—State of the Men on their Return—Weather—Results of the Hunting—Appearance of Snow-Geese—Other Birds—Order of their Arrival and Departure . . . 496—522

CHAPTER XXI.

Laborious Occupation of the Crew Its Effects—Thickness of Ice—Birds Wolves and Reindeer Incidents of Sport Red-throated Diver State of the Ice and Weather Health of the Crew—General Appearance of Scurvy Recommendations made to prevent it Pleasing Intelligence—Two Musk Oxen killed and Incidents—Great Northern Diver shot Bears Presence of Birds—Ice reported in Motion Seal killed Open Water seen to the Northward Squirrel and Scurvy Grass Their Effects State of Ice—Merry Bay Its Aspect Young Ice formed—Ship Frozen in—Gloomy Prospects—Further reduction of Provisions Plan proposed for abandoning the Ship—Results likely to follow its adoption—Our Necessities Cold and Hunger Its Effects and Incidents Hunting, its Difficulties—Close of the Year. 523—552

CHAPTER XXII.

The Year 1853—Intensity of the Cold in early months State of things on Board Reappearance of the Sun Preparation for Travelling Two Wolves shot and Incident—Hares and Lemmings—Their Habits Party told off—Opinions of their fitness—Increase of Food for Travellers Its Effects—The Sick List—The First—Death on Board—Unexpected Arrival of Lieutenant Pim—Joyful Intelligence of Relief Effect produced—Reflections—A Funeral—State of our Crew Two Deaths occurred—Want of Remedies—Return of Lieutenant Pim His kindness to us Captain McClure proceeds to Melville Island Departure of one-half of the Crew—Return of Captain McClure—Results of Journey—State of our Men on arriving at Melville Island—A Survey ordered on Board 'Investigator' Results—Ship to be abandoned Preparations—Depôt formed Abandonment of the 'Investigator' Journey to Melville Island Its Difficulties—Incidents—Our Arrival on Board the 'Resolute' and Incidents. 553—582

CHAPTER XXIII.

The 'Resolute'—Intelligence received—Improvement in Health—Sporting Parties State of the Ice Drifted off the Land—Release of the Ships Cruising Ships beset in young Ice Drifting—Winter Quarters Our Disappointment Death of Mr. Sainsbury His Funeral—The Winter The Year 1854—Commencement of the Fifth Year of Arctic Service—Departure of our Crew to Beechey Island—Mode of Travelling and Incidents of the Journey Ice—Travelling in the Spring Arrival on Board H.M.S. 'North Star'—Death of Thomas Morgan—Abandonment of 'Resolute' and 'Intrepid'—Intelligence received of 'Enterprise'—A Visit to the 'Investigator'—State in which she was found—Inferences—Incidents—Abandonment of 'Assistance' and 'Pioneer'—Arrivals—Departure from Beechey Island—Incidents Arrival in England. 583—626

INTRODUCTION.

It is not my intention, nor, indeed, do I consider it necessary, to offer any remarks on the Progress of Arctic Exploration and Discovery, in which this Country has at various times been engaged, during a period of three hundred years, in endeavouring to discover a Passage between the Atlantic and Pacific Oceans, which, until 1850, had been sought in vain. History has already done justice to the great and persevering efforts of the earlier Arctic Navigators; and the deeds of daring, skill, and enterprize which characterized the more recent Expeditions, are yet too fresh in the memory of the Nation to call for any observation here. They must ever remain an imperishable record of the prowess and energy of British seamen and marines. It must not, however, be forgotten that the earlier Navigators—our Pioneers in those icy seas—are entitled to share in the honour of the Discovery of a North-West Passage, having

indicated the way that led *us* to solve the difficult problem

The efforts so nobly and perseveringly made by this country, in search of Sir John Franklin and his companions, must form one of the brightest pages in our history. Proud may a country feel, on turning to a record of the deeds of heroism and endurance in connection with this unparalleled search, affording as it does unquestionable evidence that the advance of civilization and refinement has produced no enervating influence or deterioration on the character of her sons. Nor, in connection with this search, must I omit to mention the noble and spirited efforts made by our Transatlantic brethren, efforts which have excited in this country so high an appreciation and such grateful feelings.

I must also mention the name of a Lady,* who has elicited the admiration and sympathy of the world for the devotion and constancy she has displayed and the efforts she has made in endeavouring to ascertain the fate of her heroic husband and his brave followers.

It is needless to revert to errors that may have been committed in directing the search, which led to a failure in the object of these Expeditions. For these, we were not responsible — officers and men obeyed orders, and did their duty. That our efforts met with entire approval, we have

* Lady Franklin

the proud gratification of knowing — our Most Gracious Sovereign having marked Her sense of our services, by bestowing a Decoration on all engaged in Arctic Service from 1819 to 1855.

Deep interest and anxiety were felt, not only in this country, but throughout the civilized world, for the fate of Sir John Franklin and his companions, at the close of 1849, on the return of the Expedition under Sir James C. Ross, in 1849, without discovering any traces of them. The Government then determined on prosecuting the search in an opposite direction, in the hope of meeting with the missing vessels towards the termination of their voyage. An Expedition, therefore, consisting of H.M. Ships 'Enterprise' and 'Investigator,' was immediately fitted out, and ordered to proceed to Behring's Strait, and enter the Polar Sea from the westward. The command was entrusted to Captain Richard Collinson, C.B. That officer hoisted his pendant in the 'Enterprise,' and the command of the 'Investigator' was given to Commander Robert J. Le Mesurier M'Clure. To this ship I was appointed.

These vessels had but recently returned from the Polar Sea, where they had suffered much in their conflicts with the ice. They were now thoroughly repaired, and fitted for further service with all possible dispatch, and on the 18th of December were

commissioned at Woolwich. As they had a seven months' voyage in perspective, it was necessary that they should leave England early in January, so as to ensure reaching the ice in good time. So rapidly did their equipment proceed, that, to the credit of all engaged in it, be it recorded, on the 10th of January, 1850, three weeks only from the date of their commission, both ships were ready for sea.

The perilous nature of the service, to say nothing of its popular and philanthropic character, was quite sufficient to call forth a host of volunteers.

The selection of men for Polar Service is a duty of the greatest import, for on their physical capabilities and moral endowments must depend not only the efficiency of the Expedition, but its safety in the hour of emergency. This duty, therefore, demanded my greatest care and attention. Men, for Arctic Service, should be of a cheerful disposition, free from disease, "without blemish and without spot," inured to the life of a sailor, or, in other words, regular "man-o'-war's men," in age varying from twenty to thirty or thirty-two years, of middle stature, well-proportioned bodies, strong, and active, with a well-developed, capacious chest, sound heart and lungs—organs which, under any circumstances, are the most severely taxed—of stout, muscular limbs, with a light, active gait, and

free from any constitutional or hereditary predisposition to disease. A list of the Officers and crew of the 'Investigator' is subjoined.

Although the above requisites were not all combined in each man, the result has, I think, proved—from the privations and hardships they so long sustained, and the unprecedented circumstance of their number remaining undiminished by death for a period of nearly three years and a half—that they were a most efficient and able body of men, well adapted for the service, on which their powers were so severely tested.

The preserved meats could not be got ready in time to receive them at Woolwich, and we were ordered round to Plymouth to await their arrival from Ireland. They were supplied by the Messrs. Gamble, of Cork, and reflect credit on that firm, both from their excellent quality, and from the dispatch used in their preparation, owing to the short notice they had on taking the contract. We met with considerable losses in this valuable article, but from causes for which the contractors were not responsible. The salt-beef and pork were of the same excellent quality; nevertheless, this department of victualling admits of much improvement.

The clothing, with which we were liberally supplied by Government, was well suited for Arctic Service, and contributed largely to our comfort; but our

experience suggested several improvements which might be advantageously made in future equipments.

On the 10th of January, 1850, we took our departure from Woolwich, and after encountering very boisterous weather in the Channel, reached Plymouth on the morning of the 14th, where we found the preserved meats awaiting our arrival. The utmost dispatch was used in getting them on board, and everything was completed for sailing on the evening of the 19th of January, when the ships were reported ready for sea.

*A List of the Officers and Men of H.M.S. 'Investigator,' who
Discovered and Made the North-West Passage.*

Name.	Rank or Rating.	Remarks.
Robt. J. L. M. McClure .	Commander.	{ Died on board H.M.S. 'Resolute,' off Cape Cock- burn, Nov. 14th, 1853, from Consumption.
Wm. H. Haswell . . .	Lieutenant.	
Samuel G. Cresswell . .	Ditto.	
Alex. Armstrong, M.D. .	Surgeon.	
Robert J. Wynniatt . . .	Mate.	
Hubert H. Sainsbury . .	Ditto.	{ Rated Quartermaster, Dec. 24th, 1850.
Henry Piers	Assistant-Surgeon.	
Stephen Court	Second Master.	
Joseph C. Paine	Clerk in Charge.	
George J. Ford	2nd-Class Carpenter.	
George Kennedy	Acting Boatswain.	
William Newton	1st-Mate.	
Henry May	Quartermaster.	
Michael Flinn	Ditto.	
George Brown	Ditto.	
Edward Fawcett	Boatswain's Mate	
Henry Bluff	Ditto.	
Joseph Farey	Sailmaker.	
Isaac Stubbsfield	Ship's Cook.	
John Kerr	Gunner's Mate.	
James Williams	Captain of the Hold.	{ Died April 13th, 1853, on board the 'Investigator,' in the Bay of Mercy, from the effects of Scurvy.
John Calder	Ditto Forecastle.	
Peter Thompson	Ditto Fore-top.	
Robert Tiffany	Ditto Main-top.	
James Evans	Caulker.	
Henry Stone	Blacksmith and Armourer.	
Henry Gauze	Carpenter's Mate.	
Cornelius Hulott	Captain's Coxswain.	
Wm. Whitfield	Carpenter's Crew.	
John Wilcox	Paymaster's Steward.	
George L. Milner	Officers' Steward.	
Henry Sugden	Ditto Cook	
Richard Ross	Able Seaman.	

List of the Officers and Crew of H.M.S. 'Investigator'—(Continued).

<i>Names.</i>	<i>Rank or Rating.</i>	<i>Remarks.</i>
James McDonald	Able Seaman.	
Wm. Batten	Ditto.	
George Gibbs	Ditto.	{ Died on board the 'North Star,' at Beechy Island, May 22nd, 1854, from the effects of Scurvy and Scrofula.
Thomas Morgan.	Ditto.	
John Davies	Ditto.	
Samuel Mackenzie	Ditto.	
Charles Steel	Ditto.	
David Harris.	Ditto.	{ Died on board the 'Investigator,' in the Bay of Mercy, April 11th, 1854, from the effects of Scurvy.
John Ames	Ditto.	
Charles Anderson	Ditto.	
Fredk. Taylor	Ditto.	
James Nelson	Ditto.	
William Carroll	Ditto.	{ Died on board the 'Investigator,' in the Bay of Mercy, April 8th, 1854, from the effects of Scurvy.
George Olley	Ditto.	
Mark Handbury	Ditto.	
John Ramsay	Ditto.	
John Boyle	Ditto.	
Thomas Toy	Ditto.	
Samuel Rounsall	Ditto.	
Ellis Griffiths.	Ditto.	
John Knefe	Ditto.	
Mark Griffiths	Ditto.	
Thos. S. Carmichael	Ditto.	
Samuel Rolfe	Ditto.	
John Woon	Serjeant Royal Marines.	{ Promoted to be Colour-Serjeant.
John B. Farguharson	Corporal Ditto.	{ Promoted to be Serjeant.
George Parfitt	Private Ditto.	
Elias Bow.	Private Ditto.	
James Biggs	Private Ditto.	
Thomas Bancroft	Private Ditto.	
Thomas King.	Private Ditto.	
James Saunders	Private Ditto.	
John A. Meirteching	Equippamz Interpreter.	

TO
FIELD MARSHAL .
HIS ROYAL HIGHNESS PRINCE ALBERT, K.G.

&c. &c. &c.

THE FOLLOWING PAGES ARE,
WITH THE GRACIOUS PERMISSION OF
HIS ROYAL HIGHNESS,
MOST RESPECTFULLY DEDICATED,
IN ADMIRATION OF
HIS DISTINGUISHED TALENTS AND VIRTUES,
AND OF
THE FOSTERING PATRONAGE
HE HAS EVER EXTENDED TO
SCIENCE, LITERATURE AND ART,—
AS WELL AS
IN GRATEFUL ACKNOWLEDGMENT
OF MANY ACTS OF CONDESCENSION AND KINDNESS
RECEIVED AT THE HANDS OF HIS ROYAL HIGHNESS,
WHEN FORMERLY SERVING IN
HER MAJESTY'S YACHT,
BY
HIS ROYAL HIGHNESS'S
MOST OBEDIENT HUMBLE SERVANT,

THE AUTHOR.

P R E F A C E.

THE delay which has arisen in the publication of this Narrative, has proceeded from circumstances over which I had no control.

On my return, from Arctic Service, at the close of 1854, my health was so much shattered, that I was unable to undertake any literary labour. Early in the following year, as soon as it was recruited, the exigencies of the war in which this country was then engaged, called me again into active service. After taking part in the Baltic campaign, the ship to which I belonged was ordered to the West Indies, from whence I have but lately returned, and until very recently have been unable to devote any time to authorship. I still hope, however, that a faithful Personal Narrative of the circumstances attending this memorable voyage, may not prove uninteresting. It possesses the advantage of having been compiled from a Journal in which I daily noted events precisely as they occurred, and now publish at the request of my former shipmates.

My principal object in writing this Work, has been to do justice to *every one* engaged in a voyage which,

for its duration and privations, is, I believe, unparalleled in Maritime annals; and to place before the world an accurate account of deeds, which, for heroism, devotion, and endurance, have never been surpassed; feeling assured that all employed in this Expedition are entitled to the admiration and the gratitude of their country. Agreeable as this duty has been to me, it has not been without its alloy. I have felt that I could not, consistently with the impartial discharge of my duty as the Historian of the North-West Passage, record some of the events, without giving them what I know to be both a just, and an honest criticism. That we committed errors in our voyage, it is vain to deny; and, unpleasant as it has been to me to point them out, I should consider myself unworthy the title I have assumed, had I shrunk from doing so. I trust, however, my remarks will be received in the spirit which induced me to make them, and that others may avoid the errors we committed, should they ever be engaged on a similar service.

It has been stated that our Discovery of the Passage was secondary to that of Sir John Franklin's Expedition. This, in the present state of our knowledge regarding the fate of that Expedition, I cannot admit. I should feel happy, not only to concede the point, but to announce it, in my reverence for the memory of such a brave and intrepid band, could I be convinced any proof existed of

their having reached the Coast of America in the summer of 1850. That they did reach this Coast, I freely admit, and, assuming that they did so by Peel Sound—thereby establishing the existence of a Passage in that direction—there is no evidence which can possibly be relied on, that it was prior to the period of our Discovery, (October, 1850). In the absence of this proof, therefore, I must reserve for H.M.S. 'Investigator' the priority of the discovery. But should the fact be ascertained to the contrary, I shall be the first to acknowledge it, with undying admiration for those who sacrificed their lives in its attainment.

I have to regret that the department of Natural History, in connection with our voyage, is not so full or satisfactory as I could have wished, from the fact of my entire collection having been left in the ship, much to my regret, on her abandonment. I have, however, endeavoured to supply the deficiency, as far as lay in my power, from my notes.

I am indebted to Dr. J. D. Hooker, F.R.S., of Kew, for the information, that he had described and published an account of the plants collected by my late friend, Robert Anderson, Esq., Surgeon of H.M.S. 'Enterprise,' (by whose death the Navy lost one of its ablest and most accomplished Medical Officers). As these specimens were obtained on the same lands as my own, and as they are identical with them, I have placed a list of them in the Appendix.

To Wm. M. Rice, Esq., of Woolwich Dockyard, I am greatly indebted for having obligingly furnished me with beautifully-executed drawings illustrative of the plan by which the 'Investigator' was strengthened for the ice, and warmed by means of Sylvester's Heating Apparatus, together with two valuable Papers on the subject:—that on the Warming Apparatus was compiled by S. Egan Rosser, Esq., C.E. I regret, however, that the drawings came too late to be at present available. The Papers will be found in the Appendix.

I beg to express my grateful acknowledgments to Sir James Clark, Bart., Physician to Her Majesty the Queen, for the personal kindness and valuable advice and assistance I have received from him in connection with this Work.

From Dr. M'Cormick, R.N. I received a very interesting account of the Geology of Kerguelen's Land, and for which I beg to return my sincere thanks.

To Alex. Carte, Esq., of the Royal Dublin Society, Captain Washington, Hydrographer of the Admiralty, John Barrow, Esq., F.R.S., Richard King, Esq., M.D., and other kind friends, my best thanks are due, for their handsome offers of assistance when preparing this Narrative for the Press.

London, March, 1837.

CONTENTS.

CHAPTER I.

Departure from England—Weather—First Disaster at Sea—Our Crew—Heavy Gale—Ship Leaky—Results—Part Company with our Consort—Change of Weather—Means adopted for drying Ship—Cause of Leakage—Results of our Hasty Departure from England—Lime Juice—Enter the Tropics—Temperature of Air and Decks—Crowded State and Results—Evenings in the Tropics—The Tropic Bird—Flying Fish—Their Flight, &c.—Change of Weather—Stormy Petrel—Rum and Incidents—Thunder—Porpoises—Bathing—Strange Sail—Cross the Equator—Ships—Their Suspicious Appearance—Leave the Tropics—Temperate Zone—Sunset—Weather—Albatross and other Birds—Character of Winds on either side of Equator—Discolouration of Water—South-west Gale—Incidents—South America—Moth, Flight and Capture—Change of Weather, &c.—A Whale—Progress—Temperature and Soundings—Birds—Double Pay commences—Land—Cape Virginia—Enter Straits of Magellan—Guanaco—Patagonia and Terra del Fuego—Appearances of Land—Meet H.M.S. 'Gorgon'—Another Steamer—Intelligence of 'Enterprise'—Taken in Tow—Sight a Wreck—The Coast—Patagonians—Fuegian Coast—Temperature—Port Famine—Altered Aspect of Land—Fortescue Bay—Meet our Consort and Incidents. 1—29

CHAPTER II.

Preparations for leaving the Strait—Medical Survey—Specimens obtained—Departure—Aspect of the Land—Fuegians—Their Appearance, &c.—Enter the Pacific—Weather—Towing—Part company with 'Enterprise' and 'Gorgon'—Heavy Gale, driven to the Latitude of Cape Horn—State of Ship—A Spar seen—Damage sustained—Disaster—Loss of Masts—Man overboard—Whales—Recover Life Buoy—State of the Crew—Storm Birds—Incidents—Wandering Albatross—Their Capture—Sooty Albatross—Deep Sea Soundings, and Temperature of Water—Loss of Bread from Leakage—Reflections on the Voyage—Tropic Birds—Enter the Tropics—Shape course for Owhyee—Progress—Cross the Equator Rain—Trade Winds—Temperature of Air and Water—Sight of Land—Mona Roa, its height, appearance, and character—Feelings on seeing it—Islands of Mowee and Morotui—Appearances—Ship

—Oahu—Flying Fish—Arrival of Pilot—Intelligence of our Consort—Anchor in the Roads—H.M.S. 'Swift'—Appearance and Character of Island—Entrance to Harbour—Preparations for Sea—Honolulu, Government, &c.—Missionaries—Their Laws and Influence—Protectorate of Great Britain—Commerce—Supply and Demand for all Articles—Houses, Natives, Appearance, Dress, and Character—Laws existing—Incidents attending Excursions—Character and Appearance of the Island—Legend of its Conquest—Our Crew—Arrival of 'Cockatrice'—Letters and Despatches from England—Completion of Work—Senior Officer's intentions—Effect produced—Climate of Islands. 31—60

CHAPTER III.

Departure from Honolulu—Completion of Stores and Provisions, and facilities afforded—Orders of Captain Collinson—His intended Route—Valuable Intelligence received respecting the Winds—Adoption of it and Success which followed—Incidents and Events—Enter the Temperate Zone—Progress and Soundings—Currents—Change of Temperature—Pass the Aleutian Islands, and enter the Kamtschatka Sea—Sea Birds—First Seal seen—Gore's Island, Currents and Temperature—Difficulties of Navigation—Weather—King's Island—Soundings—Pass Behring's Strait—Cross the Arctic Circle—Incidents—Whales—Temperature of Air and Water—Steer for Cape Lisburne—Issue Warm Clothing—Meet the 'Plover'—Unfavourable Report of the Ice—Incidents—Grow's Nest—Cape Lisburne—Birds and Drift-wood—H.M.S. 'Herald'—Non-arrival of 'Enterprise'—Determination to enter the Ice alone—Aspect of the Cape—Object of Visiting it—Signal from 'Herald'—Probable Position of 'Enterprise'—Part company with 'Herald'—Admiralty Orders to keep Company—Proceed to the North—Reflections—Value of Two Ships in Polar Navigation—Weather—Sunset. 61—60

CHAPTER IV.

Enter the Ice—Its Appearance—Walruses—Progress and Incidents—Currents—Temperature—Approach the Land—Meet 'Plover'—Esquimaux Graves—Point Barrow rounded—Position and Appearance of Ice—Tides and Currents—Aspect of Ice—An Icy Scow—Cruising in the Pack—Difficulties and Incidents—Regain the Coast—Its Difficulties and Dangers—Boats towing—Encounters with the ice—Reflections—Ice and Water—Character of former—Sunset over Ice—Point Drew—First Interview with Esquimaux—Their Visit to the Ship—Incidents—Barter—Women—Boats—Incidents and Character of Esquimaux—Visits from several Tribes—Approach Point Pitt—Landing—Deposit a Record—Mounds—Ship grounded—Difficulties of our position—Colville River—Jones' Islands—Visit to them—Esquimaux—Interview—Incidents—Thieving, and Visit to the Ship—Means adopted for recording our Visit—Progress—Temperature of Air and Water. 61—119

CHAPTER V.

Difficulties in working to the North-East—Ship secured to Floe—Ice—Artery—Cast off from Floe—Progress and Incidents—An Island discovered—Point Anxiety—Critical Position—Our Difficulties—Ship on Shore—Means adopted in consequence—Results—Again under Sail and Incidents—Boat capsizes—Loss of 334 lbs. of Meat—Weather—An Ice Scene—The Pack—Our Position and State of the Ice—The Resolution adopted—Fail in effecting our Escape—A Thunder Storm—Rain and Results—Endeavour to regain the Mainland—Towing—Incidents—The Ice—Its Difficulties—Operations—Success attending them—Ship secured to ice—Appearance—An Ice Scene—The New Island—Its Features and Character—Incidents and Observations—A Bear Track—Whales' Skulls—Ship, her Appearance—Weather—Cast off from Floe—The Ice—Its Aspect—Reflections—Incidents—Progress, Brighter Prospects and Better Results—Hopes of reaching Banks' Land—Reflections—Appearance of Ice—Open Water—Course to the Northward arrested—Soundings—Position—The Pack—Alter Course—Weather—Make the Land—Towing—Results of running into Pack—Solitude of our Position—Stand in for the Land—Tidal Line—The Water—Alluvial Deposition and Results—Islands—Weather and Difficulties of Navigation—'Plover's' Boats—Mackenzie River—Remarks . . . 113—157

CHAPTER VI.

Weather—Point Warren—Esquimaux—Their Encampment—Appearance of a European—Landing on the Beach—A Grave—Hostile Reception by the Natives—Incidents—Peace established—The Womru—Sick Man and Incidents—Appearance of the Men—Their Hut—Consternation produced by the Ship—Results—Flight of the Tribe—Intercourse with the Indians—Fire Water—Discovery of a Button and Results—Reported Murder of a European and a Party on the Coast—Boats seen—Appearance of their Huts—Their Interior—Presents—Provisions—Language—Departure for the Ship—Arrive on Board—Remain off the Point—Herald—Search for the Hut—Results—Construction of Huts—Incidents—Return on Board—Progress—Observations Harrowby Bay—Land at Point Maitland—Deposit a Record—Incidents—Appearance of Land—Natives—Visit to the Shore and Incidents attending it—Return to the Ship—Baillie Islands—Birds . . . 158—169

CHAPTER VII.

Weather—Revisit the Shore—Incidents—The Coast—Cape Bathurst—Encampment—Land on the Isthmus—Advance to Encampment—Esquimaux—Interview and Incidents—Their Hostile Aspect—Altered Demonour—Appearance of Men and Women—Incidents

Fire Water—Barter—Despatches—Negotiation for their transmission—Return to the Boat—Presents to the Natives—A Gun—A Thief—Their Rude Behaviour—War Whoop—Difficulty in clearing the Boat—Leave the Shore—Boat Aground—Esquimaux Kayaks—Their Weapons—Mode of using them—Incidents attending our Return—Their Visit to the Ship—Invitation to the Encampment—Departure from Baillie's Islands—Visits from Esquimaux and Incidents—Their Account of other Expeditions—A Visit—Expectation of a Ship with Presents—Their Departure from the Ship—Esquimaux, their Habits, Manners, and Customs. 170—190

CHAPTER VIII.

Departure from Cape Bathurst—Aurora Borealis—Ice—Currents—Franklin Bay—Rain—River Horton—Aspect of Land—A Bear—Refraction—Strange Appearances on Shore—Report of the Ice Mate—The Ice—A Boat despatched to the Shore—Whales and Seals—Cause of Strange Appearances—Volcanic Mounds—Weather—Difficulties—Character of Coast—Incident on Board—The Evening—Ship Bezet—Cape Parry—Land discovered to the N.E.—Opinions—Position at Evening—Sunset—Aspect at Morning—Possession of Land—Name bestowed—Its Character and Incidents—Appearance of Headland and Coast—Birds seen—Progress—Incidents—Shape a Course to North-East—Weather—Difficulties—Sight of Land—Hopes and Conjectures—Currents—Temperature—Discovery of Prince Albert's Land—Discovery of Islands—Appearance of Sea—Position—Weather—Ship Bezet—Gloomy Evening—Occupation—Change of Prospects—Attempt to force a Passage and Failure—Position—Amusements—Altered Aspect of Ice—Secure to Ground Ice—Sudden Departure—Difficulties—Birds. 200—229

CHAPTER IX.

Young Ice—Its Formation—Our Position—Barrow's Strait—Opinions respecting the Existence of a Passage—Drifting in the Pack—Incidents and Dangers—Equinoctial Gales—Critical Position of the Ship—Increasing Dangers—Preparations to meet Casualties—Aspect of Ice—Pressure—Continues drifting—Arrangements for abandoning Ship—Assault of the Ice—Hawser and Life-buoy carried away—Abatement of the Gale—Change of Weather—Temperature—Position—Collisions—Approach Princess Royal Islands—Critical Position—Escape—Conclusions arrived at—Last Day of September—Preparations for Wintering—Parhelion and Parhelicum—Birds—Early Days of October and Occupation—Ice in Motion—Heavy Pressure—Alteration in Appearance of Ice—Experiments with Gunpowder in blasting—Aurora Borealis—Completion of Winter Preparations—Daily Routine and Exercise—Ice in Motion—Its Aspect—Reflections—Weather. 230—246

CHAPTER X.

Appearance of Weather—Departure from the Ship—Journey across the Ice—Reach Prince Albert's Land—Take Formal Possession of it in the Queen's Name—Ascend the Mountain—Incidents—Appearance of Land and Ice—Our View from its Summit—Existence of a North-West Passage established—Descent—Refreshment—Journey across the Ice arrested—Critical Position—A Night's Adventure—Incidents—Arrival of Relief—Return on Board—Hallkett's Boats—Results of the Day—Celebration of taking Possession of Prince Albert's Land—Ship Stationary and Position—Preparations for a Journey to the Northward—Visit Princess Royal Islands and take Possession—Appearance of Ice grounded—Geological Character of Islands. 249—270

CHAPTER XI.

Departure of the Travelling Party—Passage over Rough Ice—Fatigue Party—Their Route and Return—Accident to Sledge—Despatch a Sledge and Party—A Shooting Party—Five Musk Oxen killed—Measures adopted—Animals brought on Board—Quantity of Meat obtained—Return of Captain McClure—Confirmation of the Previous Discovery of the North-West Passage—View from Mount Observation—Parry and Richardson—Points Peel and Russell—Homeward Journey—A Night on the Ice—Reception of the Party—Difficulties and Hardships of the Journey—Food consumed—Penutican and Oatmeal—Housing in—Ventilation and Warming Ship—Early Days of November—Occupations of the Men—Departure of the Sun—Aspect of Winter—Weather—December—A Fox Hunt—The Solstice—Christmas—A Seal—Weather—Last Day of the Year. 271—294

CHAPTER XII.

The First Day of 1851—Our Health and Efficiency—Inspection of Crew—Thickness of Ice—Reindeer seen and pursued—Temperature of the Month—Return of the Raven—Re-appearance of the Sun—A Wolf and Incidents—Effects of Sun's Rays on Ice—First Spring Operations—A Fox—A Hare killed—A Bear seen and pursuit—Visit to the Western Land—Barrow Island and Incidents—Appearance of Land—Removal of Snow Embankment—Temperature of the Month—Survey of Provisions—Sudden Rise of Temperature—Preparations for Travelling—Despatch of Searching Parties—Their Direction—Importance of Visiting Melville Island—Captain Austin's Expedition—Pursuit of a Bear—Snow Bunting—A Seal killed—Report of Game on the Land—Return of Mr. Wynniett and his subsequent departure—Shooting Parties—An Incident of Sport—Success in the Chase—A Bear shot—Incidents and Events. 295—325

CHAPTER XIII.

An Unexpected Arrival—Casualties—Results of the Journey—A Bear killed—Strange Discovery—Despatch of a Party—Queen's Birthday—Elucidation of a Mystery—Gulls—A Bear—Discovery of Coal Formation—Return of Travelling Party and Incidents—Esquimaux—A Visit to them—Deer—Rain—Ducks—Return of Captain McClure—Results of Travelling—Intelligence received from Esquimaux—Incidents—Frost-Bite—Bears—Return of Mr. Wynniatt's Party—Results—Necessity of Combined Action—Character of Land—Incidents—Return of Lieutenant Crosswell's Party—Progress of Thaw—State of the Ice—Temperature and Weather. 336—350

CHAPTER XIV.

State of the Ice—Mosquitoes—Water—Ship Liberated—Incidents—Drifting—The Islands—Our Flee—Make Sail—Position and Difficulties—Critical Situation of Ship—Reach Point Armstrong—Reindeer—Drifting to the Northward—Effects of Gunpowder on Ice—Point Lady Ross—A Fox—Musk Oxen—Weather and Temperature—August—Incidents—Rain—Drifting—Currents—Aspect to the Northward—Position on the 10th—Supposed Appearance of Land—Open Water—Make Sail—Fog—Its Difficulties—Ship Aground—Her Safety—Strange Coincidence—Aspect of the Coast—Conical Hills—Their Formation—Blasting with Gunpowder—Its Effects—Weather—State of the Ice to the Northward—Run off Shore to South-West—Spanker Boom carried away—A Gale—Drifting—Unpleasant Position and Prospects. 351—374

CHAPTER XV.

Departure from Prince of Wales' Strait—Chances of passing through it—Course to the Southward—Round Nelson's Head—Course to the Northward—Character of Coast—Islands discovered and Incidents—Alter Course to E.N.E.—Prospects—Land and Ice—Progress arrested—Dangerous Position—Aspect of Land—Discovery of Wood Hills—Recent and Fossilized Wood—Its Character—Petrifications—Presence of Iron and Sulphur—Woody Stratification—Bar. and Wood discovered in other localities—Geological Causes—Original Character of the Land—Inferences deduced from the Discovery—Critical Position of the Ship—A Bear Shot—Habits of these Animals—Esquimaux Mode of killing them. 375—411

CHAPTER XVI.

Weather and Prospects—Lakes—Fish—A Musk-Ox Hunt and Incidents—State of the Ice—Traces of Esquimaux—The 29th of August—Perilous Position and Miraculous Escape—Incidents—Position on the 30th—Blasting Ice—Preparations for Winter—Collecting Ballast—A Jerfalcon shot—Black Fox seen—Bears—State of the Ice—Sudden Disruption—Drifted off from the Shore

PERSONAL NARRATIVE
OF
THE DISCOVERY
OF
THE NORTH-WEST PASSAGE.

CHAPTER I.

Departure from England—Weather—First Disaster at Sea—Our Crew—Heavy Gale—Ship Leaky—Results—Part Company with our Consort—Change of Weather—Means adopted for Drying Ship—Cause of Leakage—Results of our hasty Departure from England—Lime-juice—Enter the Tropics—Temperature of Air and Decks—Crowded State and Results—Evenings in the Tropics—The Tropic Bird—Flying Fish—Their Flight, &c.—Change of Weather—Stormy Petrel—Rain and Incidents—Thunder—Porpoises—Bathing—Strange Sail—Cross the Equator—Ships—Their suspicious appearance—Leave the Tropics—Temperate Zone—Sunset—Weather—Albatross and other Birds—Character of Winds on either side of Equator—Discolouration of Water—South-west Gale—Incidents—South America—Moth, Flight and Capture—Change of Weather, &c.—A Whale—Progress—Temperature and Soundings—Birds—Double Psy commences—Land—

Cape Virgine—Enter Straits of Magellan—Guanacos—Patagonia and Terra del Fuego—Appearances of Land—Meet H.M.S. ‘Gorgon’—Another Steamer—Intelligence of ‘Enterprise’—Taken in Tow—Sight a Wreck—The Coast—Patagonians—Fuegian Coast—Temperature—Port Famine—Altered Aspect of Land—Fortescue Bay—Meet our Consort and Incidents.

On Sunday morning, the 20th of January, 1850, Her Majesty's Ships ‘Enterprise’ and ‘Investigator,’ stored, provisioned, and fully equipped for three years service in the Arctic regions, weighed anchor in Plymouth Sound, and with a fair, fresh breeze from the East South East, proceeded to sea, steering a course West by South. The ships had previously waited for a few minutes the arrival of several boats, that were making all speed towards us, and we had the gratification of receiving our letters, the last communication we were destined to have with the civilized world for many a long day. As the western extremity of the breakwater was rounded, the ships of war at anchor in the Sound dipped their snow-white ensigns of St. George, and hoisted the signal of “Success and Farewell” to cheer us on our way. With the aid of a fair wind and a crowd of canvas, the white cliffs of merry England gradually faded from our view, and as night closed in, and the shades of evening fell, the land of the brave and free was no longer visible. With stout hearts and in high spirits we thus bade adieu to our

country, and with a strange, instinctive feeling that our cruise would prove an eventful one, there appeared amongst all a determination, that whatever human efforts could achieve to promote the success of the philanthropic service on which we were employed, would not be wanting, when the time arrived, for commencing operations in the icy regions of the North.

For the next few days the weather became thick, foggy, and otherwise unfavourable, rendering it necessary to fire signal guns at intervals during the day, and rockets at night, to keep up with the 'Enterprize,' as she maintained a decided superiority over us in sailing.

On the morning of the 24th, when about 140 miles from land, the weather having become still more boisterous, and when under a press of sail in the hope of overtaking our Consort—of whom we had lost sight during the prevalence of a fog—we encountered our first disaster, a squall having carried away several spars, including fore-topmast, fore and main-top-gallant and royal masts, flying-jib-boom, and sprung the topsail-yard—thus rendering us for a time a partial wreck, and, as a natural consequence, in a state of great disorder and confusion. As morning advanced and the fog partially cleared away, the 'Enterprize' hove in sight, bore down, as we supposed to our assistance, wore under our lee quarter, and kept company for the remainder of the

day, but made no communication with us by signal or otherwise. Indeed, had she hoisted the immortal Nelsonian signal, substituting "ship" for "man," that "England expects every ship to do its duty," we could not have had a more practical illustration of it. Throughout the day all were employed in clearing away the wreck, and towards evening we had retrieved our disaster, and were gratified to see the ship once more under canvas.

This was the first opportunity we had of judging of the *matériel* of which our crew was composed, and the zeal, activity, and fine seaman-like qualities which they displayed on this occasion, fully justified all the anticipations we had formed of as fine a ship's company as ever left England.

The tempestuous weather which set in on the 25th, blowing a south-west gale, with rain and heavy squalls, caused the ship to strain much, and she consequently became leaky, making from fifteen to twenty inches of water daily in the hold; thus adding considerably to the discomfort and confusion previously created, the remedying which still continued to occupy our crew. On the night of the 26th we lost sight of our Consort during a squall, and it was not until daylight on the morning of the 31st that she became again visible. She, like ourselves, had been struggling with adversity since we parted company. The gale continued to rage with unmitigated fury, and a heavy sea running with all the colossal force

and magnitude characteristic of the Atlantic Ocean, the incessant pitching and rolling strained the ship so much, that the leakage increased, rendering it necessary to work daily at the pumps. The water likewise streamed through the ship's side and upper works to such a degree, that our cabins had at times several inches of water surging to and fro, which, coupled with her extremely crowded state both above and between decks with stores and provisions, the necessity of having the hatches frequently battened down, and the impure atmosphere thus generated below, established a state of things by no means desirable, and led us ardently to hope for a change.

On the morning of the 2nd of February we finally lost sight of our Consort. The weather having, at length, assumed a more propitious aspect, the wind, abated in force, had become more westerly, she made all plain sail and stood on her course to the south-west. We also did the same, but despite our best efforts could not keep up with her. However, we were in some degree consoled by seeing H.M.S. 'Investigator' once more under full sail, with a fine favouring gale, steering her true course to the southward, and the misery and discomfort we had lately experienced were soon forgotten under the exhilarating influence of this auspicious change in the elements.

The hatches were removed, a free current of air

admitted between decks, Sylvester's stove for heating the ship was lighted, and other means adopted to dry the decks throughout, after their late partial inundation, and all the evil results of the recent gales were thus remedied as far as it lay in our power then to do so.

We failed to discover the source of the leaking, but attributed it chiefly to the service on which the ship had been but recently employed in the Polar regions; the great pressure and straining to which she was then subject from the ice would readily account for it. We had her sides and upper works recaulked as soon as the weather admitted, with good results.

The continuous fine weather which then set in, enabled us to direct our attention to the re-stowing of the holds, and putting things generally in order, from the great state of confusion they were in on leaving England, owing to the short period allotted to us for fitting out, and the hasty way in which everything was put on board from want of time—fears having been entertained that the season would be too far advanced for commencing operations in the North, were we not to leave England before the middle of January.

On the 13th February, the ship's company were placed on a daily allowance of lime juice in accordance with the regulations of the Naval service; but owing to the special character of the service on which we were employed, double quantity was issued, viz.: one ounce

daily instead of half an ounce; the latter, the usual allowance issued in the Navy. As great care was taken to procure for us lime juice of the very best quality (some complaints having been made of that supplied to a recent expedition) we were furnished with two kinds, one of which was prepared with a tenth part of brandy, and the other, the simple acid boiled and containing no spirit. It was intimated to me by the then Director-General of the Medical Department of the Navy, that I should be called on to report on the relative merits of the two kinds of acid, and their efficacy as antiscorbutic agents on my return to this country. It, therefore, became necessary to adopt means, whereby I might be enabled to arrive at results as accurate as it was in my power to obtain. In furtherance of this object, I therefore represented the necessity of each half of the crew partaking of one preparation, and it was determined that it should be mixed in separate tubs, where each man should drink his allowance in presence of an officer.

The weather continued generally fine, wind variable, chiefly east and south-east, with a gradually increasing temperature, not only in the air, but also in the sea-water. We had on several occasions, in obedience to our orders, thrown overboard from time to time a cask or bottle containing a scroll with the position of the ship, &c., and this practice was strictly observed throughout our long voyage, until we reached the confines of the ice.

On Sunday morning the 17th February, we crossed the northern limit of the Tropic of Cancer, in long. $26^{\circ} 30'$ W., and at noon, were in lat. $22^{\circ} 10'$ N.

We had for some days previous been in expectation of meeting with the North-easterly Trade wind, but it was not until the 19th February that we first felt its cheering influence, its advent having been preceded by calms, variable winds and rain. We had then reached the lat. $18^{\circ} 4'$ N., long. $26^{\circ} 57'$ W., and the morning being fresh and fair, with a curling white sea following in our wake, sparkling in the rays of a bright Tropical sun, could not but produce an exhilarating effect on the minds of all, as we felt we had now completed the first stage on our journey.

As we continued to decrease our latitude in our southerly progress, the heat became daily more oppressive, temperature varying from 76° to 80° F., but between decks 5° higher. We were still occupied in clearing and re-stowing the holds, the foul emanations from which, arising from the damp, confined air, created by the extremely crowded state of the decks, were now being gradually dissipated, as heat and light were admitted to exercise their salutary influence in removing a great cause of unhealthiness and discomfort.

Nothing can surpass the feeling of quiet, indeed I may say luxurious enjoyment, however monotonous it may be, which one experiences after sunset in Tropical latitudes: for, exhausted more or less with

the oppressive heat of the day, the sun's departure is succeeded by a delightfully cool breeze, most grateful to one's feelings, and refreshing in its influence, which generally continues throughout the night, and gradually dies away at sunrise. It then becomes variable in force throughout the day, freshens a little after noon, but is deprived of its delicious coolness, until the close of day restores it to us again. The passive enjoyment of these delightful evenings was much enhanced by a lovely moon, shining with increased brightness in a cloudless sky, and tinging with her silvery reflection, the pretty, undulating surface of a placid sea, through which we continued steadily to wend our way.

On the 22nd of February, in lat. $12^{\circ} 26'$ N., we were favoured with the first appearance of the beautiful Tropic Bird (*Phæton Candidus*) which hovered for some time about the ship, as if to welcome us to the regions of his dwelling, but they are generally met with much further to the northward near the limit of the Tropic. The Flying Fish (*Exocoëtus Volitans*) those beautiful little denizens of Tropical seas had lately been very abundant; their flight through the air is rapid but short, describing a graceful curve in their course, and falling in the water from an apparent inability to continue on the wing. The height of the curve formed does not appear to exceed a few feet; some had flown and were caught in the main chains, which were only four feet out of water. They are generally pursued by

the Bonito (*Thynnus Vulgaris*) or some other equally ferocious enemy in the sea ; and the Frigate Bird (*Fregata Aquila*) in the air—thus affording small chance of escape. The latter in the pursuit of their prey, came close to the ship, and with wonderful dexterity and quickness, picked up the object of their chase without being arrested in their course: occasionally seizing them in their flight, and at other times barely touching the surface of the water, as the beautiful little fish emerged from it in their short but fatal aerial journey. The effect produced in their flight by the silvery reflection of the sun's rays from their delicately formed wings, is extremely beautiful, and one of those compensating sights that repay a visit to the Tropics.

On the 26th of February, in lat. $4^{\circ} 21' N.$, long. $24^{\circ} 15' W.$, we lost the north-easterly Trade wind, which was succeeded by calms and light variable winds chiefly from the southward. The barometer had previously foretold the change, and the appearance of the Stormy Petrel (*Procellaria Pelagica*) or Mother Carey's Chicken, confirmed it in the minds of sailors and led them to expect what they denominate "the other Trade," meaning thereby the south-east. The sky from its previous lovely, cloudless aspect, assumed a dark lowering appearance, the air became close and oppressive, temperature 55° , and the southern horizon afforded every indication of coming rain. In the absence of wind our sails flapped sluggishly against the masts, and our progress through the water had become

quite arrested. Presently water descended in torrents with its characteristic tropical force. It was really amusing to see all hands, officers and men busily engaged with every available utensil, exercising all their ingenuity to make the most of their opportunity. The rain did not continue more than ten minutes, and in much less time we had succeeded in obtaining a good supply. Immediately afterwards all hands were piped to wash clothes. The subsequent change in the atmosphere was most genial to our feelings—it had become cooler; although the temperature only fell 1°, yet we were wonderfully refreshed, and a light breeze springing up from the south-east, the ‘Investigator,’ previously becalmed, was again under the influence of her canvas. Thunder was heard after the rain had ceased, and lightning was but very faintly visible in consequence of the dazzling brightness of the sun which now shone forth with surpassing splendour. Porpoises made their appearance in great shoals, and the surface of the sea was still further ornamented by the beautiful iridescent tints reflected from numbers of the Portuguese Man-of-War (*Physalia Pelagica*) as if they, too, had felt the influence of the bounteous shower.

The weather for the next few days assumed a character ever variable—thunder, lightning and rain occasionally with light winds and frequent calms; we generally took advantage of the latter to bathe, but the presence of sharks, rendered some precautions

necessary for our safety, and a sail was accordingly rigged from the swinging boom, and suspended in the water sufficiently deep to allow of a good and safe bath.

On the 2nd of March, in lat. $2^{\circ} 35' N.$, long. $24^{\circ} 2' W.$, the south-east Trade wind became fully established, and we were gladdened by the sight of a strange sail (the first seen since leaving England) which hove in sight, but at too great a distance for any communication. On the following day we were still further favoured by two strange sail, one of which subsequently hoisted the colours of one of the Hanse Towns, and their presence, contributed largely to enliven the dull unvarying aspect of all around. As we approached the Equator, the heat had become very oppressive, temperature from 80° to 85° and between decks several degrees higher—in the Sick Bay as high as 94° caused from the circumstances I have previously mentioned, preventing free ventilation.

At noon, on the 5th, we crossed the Equator in lat. $28^{\circ} 6' W.$; and, as the breeze had freshened considerably during the night, it had become somewhat cooler. Temperature of air fell to 81° , and that of sea-water to 82° , with a density on examination of 1027, and much more saline to the taste, as it was likewise of higher specific gravity than I found it to be from my observations in the higher extra-tropical latitudes through which we had passed.

The usual customs were observed on the occasion

of crossing the Line, which are much too absurd and ridiculous for narration.

Our progress for the next few days was unmarked by any feature of interest. The sight of an occasional sail, and an increase of temperature, which rose to 86° , as the sun became vertical in his course to the northward on the 4th, in lat. $4^{\circ} 47' S.$, are the only events to be recorded.

As we reached the latitude of Rio Janciro, numerous vessels crossed our path, with some of which we exchanged colours. One or two of them presented a very suspicious appearance; and from their build, rig, and being without cargo, opinion was unanimous in pronouncing them slavers. They glided swiftly through the water, steering a course for the coast of Africa. The excitement of watching their progress was a very acceptable interruption to the ordinary proceedings of the day.

As we approached the limit of the Southern Tropic (Capricorn), which we crossed on the 10th of March, in long. $36^{\circ} W.$, the weather assumed an unsettled appearance; and a steady fall in the barometers foretold a change. The temperature had decreased to 79° , which proved particularly pleasant, after the intensity of the equatorial heat to which we had lately been subject. I have seldom witnessed a more beautiful sunset than that which ushered us into the Temperate Zone of the Southern hemisphere. The sun diffused the gorgeous effulgence of his rays through

a mass of dense clouds that hung heavily on the western horizon, producing the most brilliant and varied tints of colouring it is possible to conceive. As we viewed this splendid spectacle, we gladly bade adieu for a time to the regions of the Torrid Zone.

For the next few days the state of the weather was fully confirmatory of previous indications. Occasional squalls with rain, thunder and lightning, were present, and the storm birds made their appearance in considerable numbers. On the 29th, when in lat. 35° S., we first saw the Wandering Albatross, (*Diomedea Exulans*), the Cape Pigeon (*Procellaria Capensis*), and Shearwater (*Puffinus Major*), having visited us two days previously. The wind, at the same time, veered gradually round to the northward, and finally north-west, from whence it blew with the force of a gale, and with a great increase to our speed, being directly fair for us. We averaged upwards of seven and a half knots, which we considered wonderful performance for the 'Investigator.'

These strong northerly winds we found very different in the southern hemisphere from the general effects experienced by their presence in the Northern. They have the same character generally as the southerly winds in the northern hemisphere from the great change they undergo in their course through the Tropics. During their prevalence, the atmosphere becomes moist, warm and oppressive,

conveying the peculiar sensations experienced from southerly winds in our own climate. The barometers become depressed, the temperature elevated, and heavy dews are deposited at night ; while the southerly winds, coming from the Antarctic Ocean, have an effect precisely the opposite ; are cool, dry and invigorating, and a rise in the barometer with a fall in the thermometer invariably foretel their coming.

On the 30th of March, we were off the entrance to the River Plate in long. $50^{\circ} 12' W.$, as was evidenced from the altered appearance of the water, its deep blue colour having been exchanged for the peculiar greenish, muddy hue, caused by the admixture of fresh water. Its density had decreased to 1023, and we ascertained at the same time, that we had a current setting to the southward, in our favour, at the rate of twenty miles per day.

On Sunday, the 31st, we had reached the latitude of $49^{\circ} 9' S.$, long. $52^{\circ} 40' W.$, and were steering a course for Cape Virgins, the north-eastern extreme of the Straits of Magellan, which then bore S. 42 W. distant 979 miles. The morning was ushered in with a dense, hazy atmosphere, occasional rain, and a heavy sea running. The general aspect betokened a change of wind ; and at 11 A.M., the ship was suddenly taken aback by a squall from the south-west. We immediately shortened sail, sent the royal masts on deck, secured the boats, and made every preparation for a heavy gale from the south-west, which obliged

us to steer several points out of our course. Towards evening, the gale gradually increasing in force, with every indication of a wild tempestuous night, the ship was "hove to" under close-reefed main-topsail, and her head to the north-west, making from five to six points lee way in an hour, with a very heavy sea running from the southward. Previous to the change, the barometers fell; but when the wind finally settled into the south-west, they each gradually rose, viz., Marine barometer, Aneroid, and Sympiesometer. The thermometer fell eight degrees; sea-water underwent a like reduction; and the wind carried with it all that bracing, invigorating influence which never fails to accompany a southerly wind in the southern hemisphere.

The birds which had been about us for some days, became more numerous, apparently revelling in wilder enjoyment with the increasing gale. I could not but admire the truly noble appearance presented by the Wandering Albatross, as he soared aloft with marvellous ease, dignity, and grandeur, in defiance of the fury of the blast, occasionally descending with electric rapidity, and gracefully alighting on the white crest of a mountain billow, was borne majestically along on the foaming bosom of the sea. The Stormy Petrels and Shearwater appeared wonderfully excited, and much more rapid in their flight than I had hitherto observed them; evidently delighting in the boisterous fury of the elements, then so mercilessly assailing us,

as the towering seas, in rapid succession, broke with terrific force on our devoted ship, now struggling for every inch of ground in the fierce conflict, but in which, despite of all our efforts, she was driven far to leeward of her true course.

At the onset of the gale one of the *Lepidoptera* flew on board, a large species of the South American moth, which was secured and added to my collection. How a creature so delicate in its structure, and so ill adapted for a flight of some three or four hundred miles from land, could have reached us even under the most favourable circumstances, it appears difficult to conceive. Night closed in with heavy rain, thunder and lightning, and presented an appearance as wild and tempestuous as the most vivid fancy could pourtray. On the following morning, April 1st, there was no mitigation in the force of the gale, which continued to rage with unabated fury, the ship proving herself an admirable sea-boat. We had made much lee way, and upwards of a degree of Northing, so that we had lost ground considerably since the previous day at noon. The clouds had assumed the *circo-cumuli* and *strati-cumuli* character, having a white hardened appearance, apparently of dense structure, and ascending in their course, from the haze on the southern horizon contributing to their formation; and appeared to foretell a change for the better. The air was cold, clear, and invigorating, which together with the sea-water had fallen two degrees in twenty-four

hours, and the barometers were steadily in the ascendant. At noon, we found our position to be in lat. $36^{\circ} 4'$ S. long. $52^{\circ} 1'$ W., having thus lost nearly two degrees since the commencement of the tempest. Towards evening the gale had evidently diminished in force, and throughout the night continued steadily to moderate. On the morning of the 2nd, it had nearly subsided, but a heavy sea still remained to remind us of the past, rolling sluggishly along from the southward, which rendered the ship very uneasy. The storm birds had nearly deserted us, (a favourable indication of the weather) and those that remained appeared evidently much more sluggish in their flight.

On the 3rd, the wind had gradually come round to the northward, which enabled us to shape a course once more for Cape Virgins, then S. 40° , W. 1075 miles distant, but our progress was much retarded by a strong current against us from the south-west. With the change of wind, the barometer and thermometer had undergone a corresponding change of depression and elevation; sea-water likewise became more elevated in temperature. We picked up several pieces of sea-weed (*Algae*) and found it beautifully studded with groups of the "*Cirrhopoda*," young but healthy; the pedicle by which they were attached quite clear and gelatinous in appearance.

Several Whales (*Physeter Macrocephalus*) were observed at some distance, going to the southward; they

rather enlivened the dulness of all around, as they disturbed the surface of the now tranquil sea, with their huge caudal fin, and the picturesque jets of water, which they spouted into the air, as they sluggishly pursued their onward course. We also saw a small butterfly fluttering about the ship for some time, but failed to secure him, as a victim to science.

Our progress to the southward, notwithstanding the fair wind with which we were favoured, was slow, owing to the existence of a strong current against us, the power of which was, however, fortunately antagonized in the course of thirty-six hours by the continuance of the northerly winds that blew with variable force, attended by the deposition of heavy dew at night, and all the other characteristics I have previously alluded to. On the 5th of April, in lat. 41° , S., long. $54^{\circ} 35'$ W., the deep sea lead, with a self-registering thermometer attached, was sent down to the depth of 150 fathoms, and no soundings obtained: the temperature of the water was found to be 40° , and at the surface 59° , with a density of 1.025. The weather continued changeable, occasional squalls with rain, thunder and lightning, but the wind, fortunately, was for the most part fair; and as we steadily increased our latitude, we experienced a daily diminution of temperature.

On the 9th, we were afforded the pleasing evidence of our gradual approach to the land, although Cape Virgins was still 379 miles distant, having obtained

soundings in sixty fathoms fine sand, for the first time sea-wood and drift wood were likewise met with in considerable quantities. Gulls and Albatrosses again made their appearance, accompanied by representatives of all the Petrel family. Although the weather was wild and unsettled, it was less so than on former occasions when these birds were about us; our guns were consequently in requisition, and although our success was not great, we managed to procure a few specimens by firing as they flew over the ship, so that they fell on board. Trifling as these events were, they proved a most agreeable interruption to the routine of the day, and imparted, for a time, a degree of pleasant excitement, of which we heartily wished a daily repetition. When one of the Cape Pigeons, then the most numerous, had been shot and fell in the water, the rest suddenly collected around it, and commenced pecking at its yet scarce lifeless body. These birds generally approached the ship more closely than any others, with the exception of the little Storm Petrel, which with rapid, swallow like course, darted closely and fearlessly about the vessel.

On the 12th, we had reached within 200 miles of Cape Virgins, the weather had become cold and foggy, temperature had fallen to 49° and sea-water 47° ; but we continued to make good progress, and sounded daily in water varying from 60 to 70 fathoms. The number of birds continued on the increase, and we were

more fortunate in our sport than usual, having shot a fine specimen of the Magellanic Swan, (*Cygnus Anatoides*) a well known inhabitant of these latitudes, together with the Sheathbill (*Chionis Alba*) a bird frequently met with, at a great distance from land, and remarkable for the whiteness and purity of its plumage, as well as forming from its habits, the connecting link between the wading and flying birds (*Grallæ* and *Passerina*.)

At noon on the 14th, having reached within ninety-one miles of the entrance of the Straits of Magellan, and in long $67^{\circ} 57'$, W. we became from this date entitled to *double pay*, in accordance with the orders of the Admiralty, that it should commence on attaining the meridian of Cape Horn, which we had then reached. The weather had become still colder and more foggy, as to lead us to suppose we might be in the vicinity of some masses of ice drifting from the Antarctic Ocean. As evening advanced, we were anxiously looking out for any appearance of land; but the sun took his departure without disclosing it to our view.

It was therefore considered judicious to shorten sail, and alter course to West, the direction of the land, and stand in under easy sail, to await for daylight.

At six o'clock on the morning of the 15th, to our great joy, we observed the land, the first we had seen since leaving England twelve weeks before, and

the long and anxiously looked-for Cape Virgins, the south-eastern extremity of Patagonia, with its fine hold, and well-defined outline and white cliffs, opened to our view as daylight made its appearance, and at 8 A.M. we had fairly entered the Strait of Magellan. Unfortunately, however, we encountered a foul wind from the south-west, and for the remainder of the day continued tacking from the Patagonian shore to the opposite land of Terra del Fuego alternately.

The general aspect of the land on the Patagonian or northern side of the Strait, much resembles the Downs of the south coast of England; the headlands are bold, prominent and of considerable elevation, with numerous indentations on the coast line, skirted here and there by a fine sandy beach. We could observe from the ship immense herds of the Guanaco, or South American Llama (*Anchenia Llacma*) grazing on the heights, or coursing along the beach; they appeared quite the size of red deer, when viewed through a telescope; but we were too distant to be able to make more accurate observation—their numbers, however, astonished us. Birds were likewise congregated on the beach in great abundance—the towering outline of the Emen (*Rhea Americana*) stood forth in bold relief amongst myriads of the feathered tribe that surrounded them. The majority appeared, from their plumage and general character, to belong chiefly to that family with which we had been

so long familiar (*Palmipides*) and that had afforded us, on our long cruise, some sport and much cheerful excitement.

We could not discern any trace of habitation, or of the remarkable inhabitants of this part of the world, and the feeling of evident security, which the Guanaco, an animal remarkable for its shyness and timidity, appeared to experience, and collected in vast herds, led us to suppose that they were far removed from the haunts of man, and but seldom disturbed by travellers.

The coast of Terra del Fuego, in this part of the Strait, appeared in its outline somewhat similar to that of Patagonia, but we did not approach sufficiently near to make accurate observations.

Early on the following morning, the 16th, at 3 A.M., the strength of the tide setting to the eastward, and adverse winds, compelled us to anchor off Cape Possession.

At 7.30, we were again under weigh, and took advantage of the first turn of tide setting to the westward, soon after which we observed a steamer at anchor in Possession Bay ; and much to our satisfaction exchanged numbers with Her Majesty's steam-sloop 'Gorgon,' awaiting our arrival, to lend us all possible assistance in our passage through the Strait. She had been dispatched from Valparaiso especially for this purpose by the Admiral, on receipt of orders from the Admiralty—a wise measure, as the passage, through

the Strait, by such a ship as ours could not otherwise have been undertaken with safety. She had previously towed the 'Enterprise' some distance, and returned for the 'Investigator.'

After communicating by signal with 'Gorgon,' we stood on, when she immediately lighted fires and made all preparations to follow. Soon afterwards another steamer was observed following in our wake, and having closed with us, much sooner than we expected from her great speed, she proved to be the "New World" of New York, bound for Valparaiso and California, last from Rio Janeiro, and as we were informed only *ten days out*—an announcement we received for as much as it was worth, and with much amusement. She was freighted with a cargo of adventurers, about as wild and motley looking a set of fellows as I ever saw, headed by a captain worthy to be the leader of such a band; after a verbal interchange of compliments, she proceeded on her voyage at a rapid rate, carrying American colours.

The 'Gorgon' closed with us, about three o'clock, soon after which the tide having turned, she took us in tow, and proceeded onwards at a speed from five to six knots an hour. From her we learned of the safe arrival of our consort 'Enterprise,' six days before, and that she was waiting our arrival at a more distant part of the Strait. On passing through the first narrows, as they are called from the proximity of land on either side, we observed on Point Barranca

the wreck of a vessel, high and dry on the beach, and a tent pitched a few yards distant, both of which had been deserted. We were sufficiently close to see the interior of the tent, but no sign of any of the crew of the ill-fated ship. The existence of the tent, and the ship not having the appearance of being broken up in hull, afforded pretty strong evidence that she had not been visited by the natives.

The appearance of the coast did not differ materially in its general character, from that before mentioned—it was well defined by an outline of rich-looking land; its uniformity interrupted occasionally by a few conical shaped hills, of volcanic origin, intervening between which and the sea, a narrow strip of soil, presenting a low undulating surface, affording apparently, the finest pasturage to the herds of Guanacos which we saw grazing on it; but they were not near so numerous as we had seen elsewhere. As we advanced towards that part of the Strait, marked on the chart Indian Cove, we observed a dense volume of smoke ascending between a low range of hills; this was found to proceed from a Patagonian encampment, as seen from the masthead, and around which the natives were sitting. Soon afterwards, but further on, we observed the smoke of a fire kindled on the beach—the usual sign of a desire on the part of the natives to communicate for the purpose of barter, and with the aid of our glasses we discovered four horsemen and a few

others on foot, advancing towards an encampment, stopping occasionally to watch our movements, and ascertain any sign on our part of communicating. The distance was too great to enable us to judge accurately of their stature, but they certainly appeared much above the average size of ordinary men. The advance of night did not allow us to continue our observations, as we still kept on our course, and remained but little enlightened on the much talked of subject of Patagonian stature; nor were we subsequently afforded an opportunity of solving the problem.

We observed the outline of the Fuegian coast, in this part of the Strait much more irregular in appearance and character, and the soil which is sandy, more arid, and barren than elsewhere; on it we saw a few Guanacos, grazing on a pasturage, evidently much inferior to that of the opposite coast, but no trace of habitation, or inhabitants whatever.

The novel excitement of the day was most acceptable to us all. The temperature had assumed that of an English winter, having fallen to 40°, but the presence of sunshine rendered the day pleasant and otherwise agreeable.

We still proceeded in tow of 'Gorgon' during the night of the 16th, and anchored at an early hour on the following morning off Port Famine, a small Chilean settlement, inhabited by a Governor and a few soldiers. The few houses of the settlement were

built of wood, and close to each other, surrounded by a stockade, very ancient looking and partially dilapidated, being the original houses of the old Spanish settlement. The place is well deserving the name it bears, from its bleak desolate aspect ; although situated on an eminence gradually inclining from the sea, it presents every external feature of poverty and starvation.

We communicated with a view of procuring fresh provisions and vegetables, if possible, for our crew ; and found that the governor (Captain Dunn of the Chilian service) was an Irishman. We were surprised on hearing him address us in his native language, which had lost nothing of *its purity and richness* from his long expatriation ; but we had evidently come to the wrong place for provisions, for not one particle could Port Famine afford us. We here learned, however, that 'Enterprise' had passed two days before. At 9 A.M. we were again under weigh in tow of steamer. The general aspect of the country from this point was quite different from what we had previously seen ; it presented an appearance wild, bold and picturesque to a degree—the mountains rose almost precipitously from the waters' edge to a height varying from 1000 to 3000 feet, wooded towards the base ; but the trees (pine) appeared small and stunted in growth. They had already assumed their wintry garb of snow, imparting a dreary, cheerless character to all around.

The course of the cataracts, produced from the thawing of the snow in summer, is well marked on the rugged face of the mountain, and the well defined channels, afford ample evidence of what must then be the force and grandeur they impart to the picturesque beauty of the scene.

At three o'clock in the afternoon, as we still proceeded in tow, and as we approached the large and commodious anchorage of Fortescue Bay, we there saw to our great delight, our long lost Consort, quietly at anchor, in expectation of our arrival. Some of us immediately repaired on board, and after a mutual interchange, and narration of incidents and adventures during our long cruise, we found that both ships had crossed the Line on the same day, and within thirty miles of each other. Her passage was otherwise much like our own, and we were happy to find all in good health and spirits like ourselves. They also informed us, that had we not made our appearance that evening, the senior officer, (Captain Collinson), intended to have gone to sea on the following morning, and after reaching the Pacific, to have sent 'Gorgon' back to assist us through the Straits—so that we had just arrived in time to rejoin our Consort.

We immediately commenced procuring a supply of water, and made every other preparation to sail at daylight on the following morning; all hands were, consequently, employed the entire night with their usual activity and zeal. The 'Enterprise' had luckily obtained a

few small bullocks, after great difficulty, at a small Chilian settlement on Sandy Cove: one half of these were immediately sent on board to us, with a good supply of fresh fish, which their labour and industry had, by the aid of nets, succeeded in catching in the bay, and both were very acceptable to us. I regretted, however, that no vegetable food could be procured, the want of which was much felt after a twelve weeks' voyage.

We passed at anchor in the bay, three American vessels, all bound to California; notwithstanding repeated efforts to get to the westward, they had been detained here no less a period than three months, owing to the prevalence of adverse winds. We therefore had good reason to feel thankful, that wisdom and foresight had placed a steamer at our disposal.

CHAPTER II.

Preparations for leaving the Strait—Medical Survey—Specimens obtained—Departure—Aspect of the land—Fuegians—Their appearance, &c.—Enter the Pacific—Weather—Towing—Part company with 'Enterprise' and 'Gorgon'—Heavy Gale, driven to the latitude of Cape Horn—State of Ship—A Spar seen—Damage sustained—Disaster—Loss of Masts—Man overboard—Whales—Recover Life-buoy—State of the Crew—Storm Birds—Incidents—Wandering Albatross—Their capture—Sooty Albatross—Deep Sea Soundings, and Temperature of Water—Loss of Bread from leakage—Reflections on the Voyage—Tropic Birds—Enter the Tropics—Shape course for Owhyee—Progress—Cross the Equator—Rain—Trade Winds—Temperature of Air and Water—Sight of Land—Mona Roa, its height, appearance, character, &c.—Feelings on seeing it—Islands of Mowee and Morotoi—Appearances, &c.—Ship—Oahu—Flying Fish—Arrival of Pilot—Intelligence of our Consort—Anchor in the Roads—H.M.S. 'Swift'—Appearance and Character of Island—Entrance to Harbour—Preparations for Sea—Honolulu, Government, &c.—Missionaries—Their Laws and Influence—Protectorate of Great Britain—Commerce—Supply and demand for all articles—Houses, Natives, Appearance, Dress, Character, &c.—Laws existing—Incidents attending Excur-

aions—Character and appearance of the Island—Legend of its Conquest—Our Crew—Arrival of 'Cockatrice'—Letters and Despatches from England—Completion of Work—Senior Officer's intentions—Effect produced—Climate of Islands.

On the following morning, the 18th, the order for sailing was countermanded, owing to the prevalence of a strong breeze from the westward, which would have rendered the towing of both ships impracticable. The day was, therefore, devoted to the completion of watering, receiving provisions from 'Gorgon,' and making other preparations for sea.

A medical survey was ordered at my request, on three of our crew, whom, from the manifestation of weakness during the voyage, and other causes unnecessary here to allude to, I considered unfit for the peculiar duties of the Expedition. They were accordingly invalided, and sent on board, 'Gorgon,' for passage to Valparaiso, *en route* to England.

The delay likewise enabled me to make several additions to the Natural History department; a few geological and botanical specimens, three species of Passerinae (*Lanius*, *Oriolus* and *Muscicapa*), together with some specimens of the Crustacea, and Zoophytes. We much regretted that time did not admit of our seeing more of this wild but interesting country, as our service admitted no delay. All were equally eager and anxious to press onwards to the scene of our future operations, as we had reached our present

position in what we considered good time ; and thus completed another important stage on our voyage.

On the morning of the 19th, at 4.30 A.M. both ships were taken in tow by 'Gorgon,' and proceeded at a speed varying from one to six knots, influenced by the tide, which we considered runs through this Strait at the rate of four or five knots an hour. As we advanced to the westward, the scenery became still more wild and grand, with an appearance of gloom, dreariness, and desolation, seldom presented elsewhere. The coast appeared everywhere almost inaccessible, from the bold, precipitous front presented by the stern outline of the rocky mountains, as they rose precipitously from the water's edge, rearing their snow-capped summits in an atmosphere rendered dense and chill by the icy blast from the southern ocean. No trace of vegetation was perceptible, no evidence that the foot of man had ever trodden the wilds of these inhospitable shores, and there was nothing to indicate that the wretched, and uncivilized Fuegian had ever dared to explore this dreary waste. Glaciers existed in the gorge of the mountains, apparently their perpetual occupants, which rendered complete the general effect of gloomy grandeur in the sterile, and uninhabited wilds of this part of Magellan's Strait.

In the early part of the day, previous to our approaching the "Land of Desolation," as it is called, we observed, on the coast of Terra del Fuego, three

canoes issuing forth from a small bay—all glasses were immediately pointed towards them, every one being excited, by more or less curiosity, to see the inhabitants of this remote part of the world. There were four in each canoe, two women paddling, and two men sitting, one at either end, the former, according to the custom which exists amongst savage nations, do the greater amount of manual labour, and on them principally devolves the management of the canoe.

These poor creatures were of low stature, dark olive complexion, with long hair streaming in the wind, and a painfully striking, animalized expression of countenance; their only covering for the body, consisted of a piece of seal-skin, thrown partially over the back and shoulders, and fastened in front. I never saw the race of man before in such an abject state of degradation. They made sundry signs and gestures from the canoes—which, by the dexterous use of the paddle, were now pretty close to the ship—manifesting a desire to communicate, but we could make no delay, and I regretted much not having had an opportunity of a closer inspection of specimens of the human race, apparently amongst the lowest in the scale of intelligence. Further on, the presence of others were indicated by fires lighted in a small indentation of the coast, and we saw several of them in a state of complete nudity, notwithstanding the coldness of the weather, standing on a rock, waving their

arms, and making other rude gestures in the air—evidently showing a desire to communicate, as we observed a canoe coming out from the little bay; but our onward course soon left it far in the distance, having considerably increased our speed.

We continued in tow of 'Gorgon' throughout the night, and next morning, the 20th, a heavy swell from the westward betokened our proximity to the Pacific. About 8 A.M. Cape Pillar was rounded, and the broad expanse of the Pacific Ocean broke fairly on our view.

We had now entered on, what was to many of us, a new domain, which certainly did not present a very propitious aspect; for the heavy sea which we met with, caused towing to become a matter of some difficulty, and as we were placed astern of 'Enterprise,' the strength of the towing lines was fully tested. We had not proceeded far, when the incessant pitching and rolling of both ships carried away one of the halbers, and our Consort, as we thought, unnaturally enough slipped the other. We were thus suddenly cast adrift on our own resources; she proceeded still in tow of the steamer, we made all sail and followed in the same course. At 1.30, however, we observed 'Enterprise' then considerably ahead, part company with the steamer, and the latter immediately bore down towards us; the cutter was then sent to her, taking our last letters and dispatches for England, but soon returned with

two halsers, and the 'Gorgon' once more took us in tow, and proceeded to follow our Consort; at 3 P.M. we finally lost sight of her, *and we never met afterwards.*

The weather in the early part of the day presented a very threatening appearance; the barometers had been gradually falling for the previous thirty-six hours, and there was every indication of a coming gale, which, towards evening, had fairly set in from the north-west with a heavy sea; the 'Gorgon,' however, led us clear of the rocky bound coast of Southern America.

Early on the morning of Sunday the 20th, 1 A.M., the towing halsers were carried away, and we were again fairly adrift. We fired rockets and hoisted lights, &c., to show our position to 'Gorgon,' and it being still dark and tempestuous, we lay to under easy sail. At daylight 'Gorgon' was observed some distance on our weather quarter, and we made efforts to communicate by hailing, writing on a board, and finally by signal; but the heavy sea which was then running, rendered our attempts abortive; nor could we possibly have sent a boat with her towing halsers, which we had on board, and which she evidently sought to recover. She dropped astern, and was last observed in the afternoon at a great distance on our lee quarter, as we supposed in search of the 'Enterprise.'

Permission having been accorded to us to call at

Easter Island, one of the most eastern of the Pacific Islands; at noon we shaped a course for it, which then bore N. 44° W. 21.45 miles distant. The gale continued to increase in force, with every prospect of its duration; the storm birds were about us in numbers; and nothing was wanting to heighten the wildness of the tempest.

At 1 A.M., on the 22nd, a blue light and rocket was observed in the south-west, which we answered; but morning failed to reveal the source from whence it came. From the onset of the gale we were utterly unable to contend against it: it being directly foul for us, we continued to make much lee way, and were drifted at the rate of from fifty to sixty miles a day to the south-west, until we reached the latitude of Cape Horn, where the wind having become more westerly, enabled us to pursue a more direct course; but no mitigation took place in its force, which continued to rage furiously, and with terrific squalls, rain, hail, thunder and lightning at intervals.

The weather steadily maintained this character, without, I may say, an hour's intermission, until the 22nd of May, when in lat. 26°. 31' S., long. 102°. 28' W., it suddenly fell calm. The lull of the tempest was of short duration, and it appeared to have acquired fresh power during this temporary cessation; for on the following morning, it again blew with its accustomed violence, and it was not until the 26th, when we had crossed the limit of the southern

Tropic (Capricorn) in long. 100°. 40' W., that it finally abated. Next day, to our inexpressible joy, we found ourselves once more under the influence of the long looked for, and now welcome south-east Trade wind.

During this bad weather, that for a period of five weeks had thus assailed us, and which for its duration and power, was quite unprecedented to the oldest of us, we felt assured no ocean in the world had less claim to the term Pacific, than the one on whose waters we had been so ruthlessly tossed. We had reason to remember this part of our voyage; indeed, it formed a memorable chapter in our naval experience. It is difficult to form an idea of the general state of the ship throughout this trying period. The hatches were, for the most part, battened down, dead-lights fitted on, excluding the light from above—ventilation almost arrested, and the decks saturated with wet, the sea-water at times, being several inches deep on the lower deck, from the heavy seas which incessantly broke over us. Cascades of salt water occasionally made their way through the several creeks and crevices in the hatchways, while the piteous moanings and creaking of the poor old ship's timbers, weeping from every pore—and the atmosphere between decks loaded with moisture and noxious effluvia, emanating from so many persons being congregated in a confined space, added largely to

the general discomfort. Apprehensions were entertained at one time, that we should be driven on the iron bound, inhospitable coast of south-western Patagonia.

On Monday, the 28th of April, a spar was observed with some rope attached floating near us, with about twelve or fourteen feet of it upright in the water, conveying the idea of its being maintained in that position by some heavy mass attached to it below water, such as rope, or cordage. It had doubtless been carried away from a ship during the gale, or was a portion of a wreck. Speculation was rife amongst us as to possibilities, as we knew our Consort could not be far distant, and her loss of a spar by no means an improbable event.

On the night of the 2nd of May, a sail was observed on our weather beam, but it being dark and cloudy, her form and distance could not be very accurately distinguished with the naked eye. With the aid of a night glass, she proved to be a barque steering to the eastward, and shewed a light which we answered with another. We first thought it was 'Enterprize,' but from the course she was pursuing, we had reason to alter our opinion.

We sustained considerable damage on our upper deck on the night of the 10th, during the raging of the storm: the head and waist hammock netting having been carried away with some other minor mischances. These were speedily repaired as well as our resources enabled us then to do.

On the morning of the 15th, a disaster similar to that which we encountered soon after leaving England, again befel us. At 6.30 A.M. (the Senior Lieutenant being the officer of the watch) a squall from the west-south-west suddenly took the ship, which carried away her fore and main top masts, and top gallant masts, together with the jib-boom—a direful casualty under the circumstances of our position. All hands were suddenly, to our great amazement, called to shorten sail and clear the wreck. Luckily for us the squall was of short duration, and the wind subsequently, for a short time fell light.

The spars with the rigging attached were hanging over the ship's side, and four of our men in their activity and zeal, had got out on the jib-boom before this was carried away, (which it was subsequently to the topmasts,) and with it were precipitated into the water—the ship pitching heavily at the time. The cry of “a man overboard” had its usual thrilling effect, when all the crew were in immediate activity to save their messmates, the life-buoy was at once let go, and a boat manned in less time than I have taken to narrate it. They were found clinging tenaciously to the rigging attached to the spars, and were soon picked up under the bows, having fortunately sustained no injury; and had only the discomfort of their temporary submersion. Our smallest boat, the dingy, as it is termed, was dispatched to recover the life-buoy then

floating at a short distance from the ship. As several whales had appeared about the ship, and were still close to us, spouting with a loud blowing noise, their graceful curves of water into the air, we became somewhat anxious for the safety of the little boat, as one of those huge monsters rising under her keel, or a stroke of its powerful tail, would inevitably have capsized her; she regained us, however, in safety. During the remainder of the day, all was bustle and activity in repairing the damages of the morning. Nothing could exceed the zeal with which our men worked, and before the sun had taken his departure, we had the satisfaction of seeing the ship again under sail. Fortunate, indeed, was this lull for us, for within twenty-four hours afterwards, the gale had increased to hurricane force, to which we dared not show a stitch of canvass, and we were driven at its mercy under "the bare poles."

The admissions to the Sick list had at this time undergone a considerable increase, from the almost constant exposure of the men on deck to the fury of the elements. The working the ship frequently requiring the whole strength of the ship's company, and the Sick Bay shared equally with other parts of the vessel, in being wet, leaky, and otherwise uncomfortable: nor was there any appearance from the nature of their diseases, of a diminution taking place in the number until the advent of more favourable weather. I could not but admire the fine spirit our

men displayed under the worst circumstances, and the cheerfulness and readiness with which they over obeyed the call of duty ; there was only one feeling of regret expressed amongst them, that the continuance of the tempestuous weather, might so far delay us in our voyage as to prevent our reaching the ice in time sufficient for active operations that season.

Throughout the long period of these gales, the storm birds were our constant companions, in greater or lesser numbers, and in addition to those formerly alluded to, we observed the Sooty Albatross, (*Diomedea fuliginosa*) and Fulmar Petrel (*Procellaria glacialis*). Either pressed by hunger or emboldened by the fury of the storm, they flew with wonderful impetuosity within a few feet of the ship; darting almost with the celerity of lightning at the slightest object they saw floating on the water, and uttering that remarkable shrill noise so peculiar to the storm birds of the ocean. Fishing lines, with hooks baited, were in great requisition, and were floated astern with a piece of corkwood attached. These they seized with voracity, and in this way we procured from time to time many specimens. On one occasion, we hooked one of the large wandering Albatrosses, and it was quite wonderful to witness the instinctive feeling of self-preservation which he displayed. When conscious of being caught, he immediately dived, and on rising with wings expanded to their utmost extent, threw himself

partially on his back, thereby adding increased power to the great surface of resistance presented to our efforts in hauling, and by this means bent the hook, which finally escaped from his mouth, and was drawn on board perfectly straight. The bird rose proudly, shook his head, and flapping his wings as if conscious of success in the recent conflict, betook himself to flight.

Two of these creatures, which we subsequently caught, were brought on board with some difficulty, measured 10 and 11 feet in the expanse of wings, and weighed 19 and 21 lbs., respectively. They were really magnificent looking birds; the plumage was white, with a mottled grey back, and dark wings—head and legs of a pink colour. They, together with all the other species of the Petrel family that were caught, ejected a large quantity of yellow oily matter, as if sickness had suddenly supervened on their change of element. The Sooty Albatross is smaller, and appears in flight, habits, and general distinctive character similar to its more powerful confrère, the young bird of this species. It has the plumage of dark grey colour gradually merging into the darker hue of the parent bird, with white chalk-like eyebrows. We caught one, and it also became sick like the others when brought on board. We only lost their company as we approached the limits of the Tropics.

On the 22nd of May, in lat. 26° 34' S., long.

101° 28' W., the deep sea lead with thermometer attached was sent down to the depth of 185 fathoms, when we found the temperature 53° F., and again to 110 fathoms, it was 65°; the temperature at the surface being 72°, and that of air 71° F., which might perhaps be considered to establish the existence of a deep southerly current from the Antarctic Ocean.

During the prevalence of bad weather, we found that water had found its way into the bread-room, from the constant straining and working of the ship, and as soon as circumstances admitted, its contents were brought on deck for survey, when no less a quantity than 9·6 lbs. was condemned as unfit for use, and thrown overboard. This great loss would have been a matter of serious consideration had it occurred at a later period of our voyage, but we were consoled with the knowledge that we should be able to supply the deficiency at the Sandwich Islands, which we subsequently did.

It is scarcely possible to describe with what pleasure we hailed our re-approach to the Tropics, as we were wafted steadily on our course by fresh and fair Trade breezes from the south-east, after the long period of bad weather we had lately experienced, with all its attendant discomforts and disasters; to say nothing of a dull, irksome feeling, inseparable from a long sea voyage, that still continued to be ours, despite the cheering influence under which we wended our way to the northward. There was

nothing present to enliven the scene, nothing broke on the view, but the broad expanse of the placid sea, with its slightly ruffled surface sparkling in the sunshine, except the flight of the Flying-Fish, the dash of the Dolphin, or the croak of the Phaeton, as he proudly soared aloft in an atmosphere pure and serene, beneath the canopy of a cloudless sky. Enlivening and agreeable as these sights at first were, their interest was now gone, and we indulged in the hope that a fair wind and a crowd of canvas would soon bring us to more varied scenes.

The Tropic Birds were met with at a higher latitude than in the Atlantic, we having seen two on the 15th May, in lat. $27^{\circ} 50'$, long. $97^{\circ} 48'$; and from the time we entered the Tropics, they were seldom a day absent. They are remarkable pretty, are about the size of a Gull, and when on the wing, they utter a peculiar shrill whistle; their plumage is entirely white, with the exception of a little black surrounding the eyes, and extending in a delicate crescentic line towards the back part of the head; the primaries, or larger wing feathers, are also tipped with black. The tail feathers are exceedingly pretty, two are prolonged from its centre, varying in length from 6 to 10 inches, of a most delicate pink colour, which contrasts beautifully with the satiny lustre of its snow-white plumage. In the young birds I observed but one, the other could be

seen on examination shooting forth from its parent nucleus. The feet and legs are short, and the wings long, rendering the creature capable of very prolonged flight. In confirmation of this, I may state, that on examining the stomach of one I found it to contain nothing but a few small masses of blue clay, the existence of which appeared very strange, as we were at the time 2000 miles distant from the South American coast, and about 600 miles from the nearest island.

On the 20th of May, on entering the Tropics, we shaped a course for the Sandwich Island, Owhyee, which then, bore N. 53° W. 4140 miles distant, and from that date continued to make uninterruptedly good progress until it was reached, carrying every stitch of canvas it was possible to crowd on the ship. Under circumstances so favourable, we made an average daily speed of upwards of 100 miles, and on one occasion 186 miles in twenty-four hours, the greatest performance the slow sailing 'Investigator' ever made.

On the 15th of June, we crossed the Equator for the second time in the space of three months, in long. 131° W. but without meeting with that heavy rain and the other atmospheric changes I had occasion to notice in the Atlantic; the weather being beautifully clear and serene.

When ten miles south of the Line, I was surprised to see a solitary little Storm Petrel, fluttering about

the ship in a state of apparent exhaustion. I hoped it would have sought a refuge on board, but in vain, as it was soon lost to view. What could have brought the poor thing so far from the usual regions of its abode, it appears difficult to conceive, as this could not then be attributed to the force of the wind, which had been long light.

On the 19th and 20th, we were favoured with heavy rain—as anxiously looked for and welcomed as on former occasions—the wind at the same time having freshened and become variable with occasional squalls; and on the 23rd we were gratified by feeling the influence of the north-east Trade, in lat. $8^{\circ} 14' N.$, long. $139^{\circ} 56' W$. My observations on the temperature of air and water, did not vary very materially from those made in the Atlantic. I remarked, however, that they were both one degree higher than we had registered on any former occasion, when five degrees north of the Equator.

At six o'clock on the morning of June the 29th, the joyful report of land was proclaimed from the mast-head, which soon brought us on deck. The snow-covered "Mona Roa," in the island of Owhyee, could be faintly discerned in the distance, and most gladly was it gazed on by us all, although the island was still forty miles distant. As we approached the land, this lofty mountain, the height of which is about 1500 feet, presented a very fine, picturesque appearance, for as the day advanced

the sun's rays gradually dispelled the mist that enshrouded it, through which its conical tops now peered, disclosing their high lands in the purest snow-white garb, and beautifully reflecting the scorching rays that illumined the chilling loveliness of the scene.

This island is of a purely volcanic character, as was fully evidenced by its general aspect. It is of great extent as we continued to run along its coast the entire day, and night did not free us from its boundaries.

I cannot express the delightful feelings with which we viewed the land, after a sea voyage of upwards of 15,000 miles, and as the ship continued to near the port, our impatience and anxiety evidently increased.

On the following day, Sunday, 30th, the other islands of the group came into view, Mowee and Morotoi, both of which were grand and lofty in their general outline, and truly picturesque. Deep gorges and valleys, in which we observed numerous huts, interrupted the continuity presented by the bold precipitous coast line which the eastern aspect of these islands presented, both of which were of volcanic origin. Judging from appearances, these gorges and valleys are quite secluded and isolated from each other, walled in, as it were, by the lofty mountains which surrounded them; apparently they were well cultivated, and the huts comfortable and commodious.

We were favoured with the agreeable sight of a fellow voyager, for the first time, I may say, since

leaving the Straits of Magellan, with whom we exchanged colours. She proved to be an American, and, like ourselves, bound for the Island of Oahu, which was visible at sunset, but as night soon afterwards closed in, the ship was hove to, to await for a pilot.

From the time we approached these islands, we observed the Flying-Fish more numerous, in greater shoals, and larger than we had at any time before seen them; they were likewise different in colour, being of a reddish brown. Several flew on board, one was no less than sixteen inches in length.

At 4 A.M., on the morning of the 1st of July, we made all sail for the harbour of Honolulu, and after firing two signal guns, a pilot came on board. We much regretted, owing to wind and tide he could not then take us into harbour, and were, therefore, obliged to anchor in the roads, outside the reefs, where we found several merchant vessels, and the French corvette 'Bayonnaise,' whose gallant Captain politely sent an officer on board, immediately we had anchored, with offers of assistance and congratulations on our arrival. We had previously exchanged numbers with H.M. Brig, 'Swift,' at anchor in the harbour.

Our first enquiry was for our consort 'Enterprize,' whom we learned, with deep regret, had only left on the morning preceding for the North, having arrived here on the 25th of June, and after replenishing

provisions, stores, &c., her Captain, not considering it prudent to wait longer for us, proceeded to sea, having left instructions for our guidance with the senior officer, Captain Aldham, of the 'Swift.' No time was therefore lost in making the necessary preparations for following her.

The appearance of the island of Oahu as we approached, was like the others, of volcanic origin, picturesque and beautiful, intersected by valleys and gorges, but skirted by low sandy plains, on one of which the flourishing town of Honolulu is situated.

These valleys are clothed in the richest verdure, and yield bananas, coco-nuts, water-melons, bread-fruit, and every variety of other tropical fruit in great abundance. There is a remarkable looking mountain situated south-east of the town, and, from its shape and isolation, standing alone on the plain close to the beach, the name of "Diamond Island" has been given to it. From its formation, it is likewise the product of igneous agency. The lower two thirds are formed of distinct volcanic cones, on which is super-imposed a stratified deposition which forms its upper third—evidently a subsidence from water, when the volcanic cones shot through the bed of the ocean, or deposited after they had been formed; but in either case, long previous to their acquiring terrestrial existence.

At six o'clock on the morning of the 2nd, we got under weigh, and proceeded to the entrance of the

harbour, where we were safely warped by the natives, and anchored. This is narrow and dangerous, as sand-banks run out on either side on which we saw the remains of several ships that had, perhaps, journeyed far over the globe, only to deposit their timbers here. On entering the narrow channel, an acute angle must be rounded, which, in certain states of the wind, is attended with danger. It is then that the warps, having been previously laid out, are seized by the natives, who, in great numbers rush into the water, and by the united power of their muscular frames, ships are warped in safety to their anchorage.

No time was lost in replenishing stores and provisions, and making all other necessary preparations for again proceeding to sea. Captain Aldham and his fine, noble-hearted crew cheerfully lent us every assistance, which enabled us to allow our men leave to go on shore and enjoy themselves after their own fashion, for they had earned every indulgence that could be granted to them, by their exemplary and admirable conduct. We commenced a thorough exploration of the island, and mounted on very indifferent horses, soon exhausted "the lions" of the place from end to end.

Honolulu has lost almost everything pertaining to its ancient character, laws and customs, and wears now an aspect truly mongrel, half native, half foreign.

The government is vested in the King and his ministers; the latter were, I think, with a solitary exception, chosen from the Missionaries who appear to exercise sovereign power in the island; the exception being that of the Minister of Foreign Affairs, (Mr. Wylie,) who is, I believe, a Scotchman. They nearly all belong to a branch of the Boston Missionary Society, and shame to our country be it told, there was not at this time a single British missionary in the entire group of Sandwich Islands. All the good work for the spiritual, and it would also appear for the temporal welfare of the people, has been accomplished by the zealous labours of the citizens of a country, to which these islands may not improbably, at a period perhaps not distant, owe their allegiance. I was certainly surprised to find that this fine group of islands daily growing in importance, from the geographical position they occupy on the globe—situated as they are on the direct highway between Asia and America, and through the latter to Europe—which owe Great Britain as their protector, and carry her Union Jack in the upper canton of their flag, were then so entirely under American influence, while the number of active and enterprising adventurers from the States far exceed those of any other nation. They certainly demand more of our fostering care and protection, otherwise the "Meteor Flag" may in time be supplanted by the "Stars and Stripes" of the New World.

There were a great number of ships in the harbour,

many of them whalers, which resort hither from their cruising ground in the north, to refit and recruit the health of their crews. The majority of the others were traders chiefly engaged in the carrying trade between China and California. About the principal wharves there is a great bustle—vessels are in process of taking in cargo, and discharging; passengers bound for California are congregated in groups; numbers of the natives are employed, whose harsh, discordant sounds of voice, by no means added to the tranquillity of the scene.

Trade is very brisk not only with these places, but, with other parts of the world, and during the previous twelve months, it had increased to a wonderful degree. In consequence of which, the call for native produce far exceeds the supply, and it would appear that the resources of the islands were unequal to meet the heaviness of the demand. I was informed that the prices of articles of every description had risen a hundred per cent., within a few months. English, American, and European manufactures and produce can be procured with facility, but at an enormous price. The markets are poorly supplied from the rapidity with which things are bought up; fruit and fish even are scarce from the same cause, and exorbitantly high in price.

There are many very fine houses in the town and neighbourhood belonging to merchants of the

place, built apparently with great regard to comfort and coolness. The native huts are numerous, and formed of a wooden frame-work well put together, and densely thatched with straw, that renders them not only cool, but likewise impervious to rain; they generally possess but one apartment, on the floor of which mats are spread, where the occupants eat, drink, and sleep. The natives appear a fine athletic race, well formed, tall and muscular, erect in their gait, and of a dark brown or copper colour. I believe, they enjoy a great immunity from those direful evils, that civilization frequently carries in her train, and which have contributed largely to the degeneration of the natives of many of the more Southern islands in the Pacific. They are clad, for the most part, in a modified style of European dress, of light fabric suitable to the climate, consisting of short trousers and shirt; but in the country both are frequently dispensed with, and the "maro" substituted; a hat being often worn with it, as if to supply the want of other portions of dress, and this apparently imparts great dignity to the wearer.

They are uniformly civil, courteous, and obliging, many instances of which I had an opportunity of observing in my rides through the island; for it not unfrequently happened to myself and companions, where roads did not abound, that we went astray. This was no sooner observed, than we could dis-

corn a lightly clad guide hastening over the plain to our assistance.

These remarks are equally applicable to the women, on whose beauty I regret to say I cannot bestow unqualified praise; nor on their dress, a long loose robe drawn closely at the neck and extending down to the feet—this is, I believe, the only garment worn, and was generally made of printed cotton of gay colours, into which yellow entered largely. This appeared to me, as they evidently thought themselves also, the tint most becoming to their complexion; other articles of dress are, of course, superadded according to the wealth and position of the individual. They are exceedingly fond of dress, and love to display bonnets gaily decked with ribbons. Veils and umbrellas are also articles much coveted, and worn even by some of the poorest class, who make great sacrifices to obtain them, while their huts afforded ample evidence of poverty and want. From the abundance of horses, they may be frequently seen mounted and riding like the men, which had rather a curious appearance; on these occasions I remarked the dress was prolonged for some distance over each foot, forming a sort of miniature habit on either side. The higher orders of females were generally attended by a female servant similarly caparisoned.

They are under very severe missionary discipline, and the savage "taboo" is extensively in force, with the laudable view, I believe, of promoting a high standard of morality in the islands; but as far as I

could ascertain, this rigour not only defeats its purpose, but tends largely to promote and foster a great amount of secret sin and infamy, which are the worst of evils. The absurd laws then in force aim to establish such a moral code, as exists amongst no people on the face of the earth, and this is largely and secretly violated by those who are obliged openly to profess it, under fear of the pains and penalties its violation entails.

I may here adduce an instance of some of the absurd, puritanical laws which exist—the use of wine and spirits, is totally prohibited, under pain of being denied the rites of baptism, and other privileges pertaining to the Christian religion; and I was informed that a respectable American merchant was anxiously looking out for the arrival of a British man-of-war, bearing a chaplain, that he might have his child, then many months old, baptised—a rite the clergymen of his own church had refused, because he allowed wine to be drunk in his house. Such is a specimen of the missionary code, and, for the good of the community, the advancement of that Holy religion, of which the law-makers are ministers, the sooner it is repealed the better.

Amongst the pleasant rides this island affords, one is deserving mention, no less from its beauty than its historical interest. It is through the delightful and picturesque valley, that rises with a gentle ascent to the westward of the town, and intersects

the lofty chain of mountains extending from end to end of the island, whose towering proportions impart much grandeur and beauty to the scenery. They are wooded to their summits, and the luxuriance of the foliage and richness of the verdure, presented a truly beautiful appearance, as the rays of a departing sun, falling on its irregular surface had from the effects of light and shade, revealed to view the most varied tints of the richest green. In the valley, and extending up the sides of the mountain, are the summer residences of the King, and of the missionaries and merchants of Honolulu; all prettily situated, where the mango, banana and palm, with every other variety of tropical produce, luxuriantly abound. The mansion of the King is a plain quiet looking house, with no particular indication of its being a Royal residence. Those of the missionaries have all a substantial comfortable appearance, which together with their well stocked farms, afford another illustration of their living in the enjoyment of the fat of the land.

This valley abruptly terminates in a ledge of high, nearly perpendicular rocks. About five miles from the town, a winding path descended to a rich plain below, skirting on the western side the longitudinal range of mountains, and corresponding to that on the opposite side of the island, whose shores were washed by the sea about a mile distant from where we were standing.

A few huts were interspersed through the plain, and around them reigned an air of quietude and repose, delightful to contemplate. The high rocks on which we stood were classic ground, for there the last battle was fought that placed the Sovereignty of this, and the other islands of the group, in the hands of the ancestor of the present king, (his grandfather, Kamehameha,) and at the base of the rock may still be seen the bones of the gallant defenders, now whitened by years of long exposure.

The story is told that when the invader landed, he was met by the natives in great numbers on the plain of Honolulu, who there gave battle. They were ultimately obliged to retreat up the valley I have mentioned, gallantly defending their soil as they retired, until they reached its top, where they made a last final stand, but were utterly vanquished; the conquerors driving them over the rocks into the precipice beneath, and left few, if any, to record their disaster, or tell how their island had passed into the hands of the invaders,

King Kamehameha III now rules, or rather is ruled by the missionaries, and they have no doubt done much in former years for the country and its inhabitants; it is, therefore, earnestly to be hoped, that a more enlightened system of legislation will soon prevail.

During our stay, I heard that an old woman

survived in a remote part of the island, who originally belonged to Owhyee. She had a clear recollection of the death of Captain Cook, and could narrate the circumstance with great accuracy. I regretted much that time did not enable me to visit her.

It was gratifying to witness the great enjoyment our men appeared to experience in their short run on shore; they were to be seen everywhere, some mounted on horseback, others running along the road in expectation of their turn to ride. All, I believe, had more or less violated the existing missionary laws, and a few gave unmistakeable evidence of indulgence in fluids stronger than water. It was only wonderful no casualties occurred, from the fearful pace at which they galloped through the country.

Nothing could exceed the fineness of the weather during our stay, and although the temperature varied from 75° to 80°, yet from the uniform regularity and steadiness of the refreshing sea breeze, the heat was by no means oppressive—the insular position of these islands tending so much to modify the effects of the high temperature which generally prevails. From all the information I could collect, the climate may be pronounced a salubrious and delightful one, as evidenced in the high standard of health enjoyed by its inhabitants, and the degree of longevity generally attained.

On the 3rd, H.M. Brigantine 'Cockatrice' arrived from Mazatlan—the Admiral having very kindly dispatched her with the latest letters and dispatches from England; but as few of the former were received, we assumed they had been sent on to Valparaiso, in the hope of meeting us there. We had originally intended to call at that port on our way to the northward; but as our passage had been so much delayed from the bad weather we experienced, the idea was abandoned.

On the evening of this day, we had nearly completed our work, and continued uninterruptedly throughout the night making preparations for our expected departure next day. All participated in the feeling of anxiety that no time should be lost, as we had heard that Captain Collinson had expressed his intention, (indeed his orders to us were to that effect, as we learned subsequently,) to take the 'Plover' into the ice with him, in the event of our not reaching Behring's Strait in time. This intelligence was received with manifest dissatisfaction—nor could we understand why we, who were all volunteers for service in the ice, should be thus thrown aside to remain in listless inactivity, while others would assume the place in this philanthropic service we could not concede to any, and which it was *our undoubted privilege to occupy*.

Had a stimulus been required for increased exertion, it was at this time present; and a general determi-

nation was taken, without our then exactly seeing the mode in which it was to be carried out, that Behring's Strait *must* be reached in the proper time, to prevent what we all individually and collectively would have considered a misfortune no less heavy than undeserved—our being debarred from taking our proper place in prosecuting the search for Franklin and his brave associates.

CHAPTER III.

Departure from Honolulu—Completion of Stores and Provisions, and facilities afforded—Orders of Captain Collinson—His intended Route—Valuable intelligence received respecting the Winds—Adoption of it and success which followed—Incidents and Events—Enter the Temperate Zone—Progress, Soundings, &c.—Currents—Change of Temperature—Pass the Aleutian Islands, and enter the Kamtschatka Sea—Sea Birds—First Seal seen—Gore's Island, Currents and Temperature—Difficulties of Navigation—Weather—King's Island—Soundings—Pass Behring's Strait—Cross the Arctic Circle—Incidents—Whales—Temperature of Air and Water—Steer for Cape Lisburne—Issue Warm Clothing—Meet the 'Plover'—Unfavourable Report of the Ice—Incidents—Crow's Nest—Cape Lisburne—Birds, Drift-wood, &c.—H.M.S. 'Herald'—Non-arrival of 'Enterprise'—Determination to enter the Ice alone—Aspect of the Cape—Object of Visiting it—Signal from 'Herald'—Probable position of 'Enterprise'—Part company with 'Herald'—Admiralty Orders to keep Company—Proceed to the North—Reflections—Value of two Ships in Polar Navigation—Weather—Sunset.

On the 4th of July, the last portion of our provisions and stock was taken on board. We failed in obtaining an ample supply of fresh meat, owing to several

bullocks having been drowned in attempting to land them from one of the native boats, and our stock was consequently reduced to one bullock and twelve sheep. The supply of fruit and vegetables was likewise short, from the scarcity consequent on the briskness of demand. It consisted of water-melons, bananas, pumpkins, cabbages, and other fruits and vegetables; but we could not then procure a single cocoa-nut, abundant as they are on the islands, all having been bought up a few days before.

The ship was again, therefore, much crowded, every available spot occupied above and below, as we had completed provisions for three years, and nothing further remained to detain us. For the rapidity with which we were thus equipped and made ready for sea, we were much indebted to the facilities afforded by the merchants, and the kind and able assistance we received from the Consul-General Miller, Captain Aldham and the officers and crew of the 'Swift.' I am sure the latter gallant and estimable officer, should these pages ever meet his eye, will not readily forget the visit of the 'Investigator,' and the *circumstances* which led to his acquaintance with her officers.

At 6 P.M., on a lovely July evening, the 'Investigator' was again under weigh, and standing out to sea, with the same light and fair breeze which had brought us to our anchorage, steering a course to the north-west.

I may here pause to mention a circumstance that, above all others, exercised the most important influence on our future destiny, and which was mainly instrumental towards making the Discovery that distinguished this Expedition.

The orders of Captain Collinson stated his intention to run down in the latitude of the Trade-winds, until he reached the meridian of 171° E., in the expectation of there meeting with westerly winds, that he expected would carry him clear of the Aleutian group of islands into Behring's Strait. This being the course generally pursued and recommended by former voyagers, and which we, no doubt, should also have followed, had a fortunate circumstance not occurred to prevent it.

On the day previous to our leaving Honolulu, we heard from the intelligent captain of a merchant ship (I think an American) who had just arrived in harbour, and who had had much experience in navigating the seas to the northward, that he had met with nothing but easterly winds for some weeks, which were the prevailing winds at this season of the year, and he strongly advised us, instead of following the course I have mentioned above, to steer direct to the northward. This he told me and several other officers, at one of the hotels where we met him, and he was most energetic in denouncing the folly of pursuing any other course. I am sorry that I am not in possession of the name

of this fine intelligent old sailor, to enable me to record it, that he might be aware of the important results that followed the adoption of his advice.

On the following day, the 5th, we had finally got clear of the most northerly of the islands, and pursuing the counsel we had received, had shaped a direct course to the north-west for the Aleutian island of Atoka, which then bore N. 72°, W. 1790 miles distant. We had thus entered on nearly the last stage of our voyage under very favourable circumstances, much refreshed by our recent visit to these lovely islands. We were in excellent health and in high spirits from the intelligence we had but lately received, and were now acting upon, in ardent expectation of reaching the scene of our future labours in good time.

Before leaving the Sandwich Islands, I took advantage of the last opportunity I expected to have, to invalide three men as unfit for the service of the Expedition, but who would be quite available for the ordinary duties of general service; and they were discharged into the 'Swift' for passage to Valparaiso. Their places were filled up by three volunteers, two from the 'Cockatrice,' and one from a merchant ship. The general state of health of the crew was excellent, although several admissions to the sick list had taken place since our departure, but

with affections of no greater importance than those generally resulting from sailor's indiscretions on shore.

On the 6th, we finally quitted the balmy regions of the Tropics in long. $160^{\circ} 10'$ W., and again entered the northern Temperate Zone with a fine fresh breeze from the N.E. which bore us steadily onward, our speed averaging each successive day considerably upwards of a hundred miles.

As we continued our northerly advance, the temperature of air and water sensibly diminished, the atmosphere gradually lost its pure, serene character, and became dense and foggy, but the wind remained still steadily in our favour, occasionally varying a point or two, but fully verifying the intelligence we had previously received. The fog was on several days so dense that we were unable to obtain a meridian altitude of the sun, nor could an object be seen any considerable distance ahead of the ship; but we still held steadily on our course. On the 19th, our observations told us of our near approach to land; several flocks of ducks and other birds were seen, which afforded us corroborative indications. The deep sea lead was sent down with thermometer to the depth of 150 fathoms, but no soundings were obtained; the temperature was ascertained to be 40° , that of the surface water being 51° , of air 50° , and the current setting to the southward was estimated at the rate of ten miles per day.

At five o'clock on the evening of the 20th, land was reported on the port bow, and the bold, stern looking outline of the eastern extremity of the island of Amia could be faintly discerned through the dense haze which enveloped it, then distant about ten miles. An hour afterwards, the western extreme of the island of Tchuman was observed on the starboard bow; indistinctly, it is true, but equally bold as its confrère on the opposite side. About the same time we passed through a rapid tide, and cleared the Strait between these islands, in which we obtained soundings in thirty-five fathoms. The hazy state of the atmosphere did not enable us to make any accurate observations of these islands, as the general aspect and outline of either could not be seen; but a small rock off the eastern extremity of Amia, might be considered a good mark whereby to identify it.

With the sun's departure this evening, we quitted the northern limit of the Pacific Ocean, which we had entered exactly three months previously. Since leaving Honolulu on the 4th, our progress speaks for itself; having entered the Kamschatka sea, on the evening of the 15th day—a passage remarkable for the favourable circumstances under which it was made, the wind never once being otherwise than fair, and this too in latitudes where the experience of the old voyagers would have led us to expect a very different state of things: and the result exceeded

the expectations of the most sanguine amongst us. We had yet another difficult stage to pass before entering the Arctic Circle, and one which could not be thought of without apprehension, from the imperfection of the charts, and the foggy weather known to prevail. While passing the Aleutian Islands, numerous flocks of sea birds were about us, they doubtless frequent them in myriads—embracing, I believe, all the family of the *Palnicipides*. Two little Auks (*Alca Alle*) flew on board at night about 10 p.m. evidently exhausted, and were speedily captured. On the 21st we shaped a course for Gore's Island, which bore north, 396 miles distant—being then in the latitude of some parts of England, (53° 44') and the height of its summer, we found a great difference in the relative temperatures of the two places, the mean of the day being 17°, which underwent a daily decrease for the remainder of the voyage. As we continued our course, we felt the effects of the southerly current in a more marked degree, carrying with it sea-weed and drift wood in considerable quantity, and the birds likewise became more numerous: the Albatross had ceased to visit us before leaving the Pacific, one species only (*Diomedea Fuliginosa*) had attended us so far; but their place was supplied by a great variety of Ducks and Divers, the King Eider (*Anas Spectabilis*) and Loon (*Uria Brunnichii*) were for the first time seen.

The Seals had likewise paid us their first visit, and one of them was fired at and wounded. Those circumstances together with the increasing daylight, afforded cheerful evidence of our progress, which was still uninterruptedly good, although the weather had become so dense, raw and foggy, that at times we could scarcely see the ship's length ahead. Early on the morning of the 25th, we were fortunate in getting a glimpse of what we supposed to be Gore's Island; it was passed during a dense fog, and with a fresh south-westerly breeze we shaped a course for King's Island, off the end of St. Lawrence Island, which then bore N. 29, E. 156 miles distant. The frequent use of the lead became now absolutely necessary, and we sounded constantly each day in water varying in depth from fourteen to thirty-seven fathoms, fine sand and mud; in one instance only did we find a rocky bottom, near lat. $63^{\circ} 11' N.$ long. $165^{\circ} 3' W.$ The navigation of the ship had become a matter of no ordinary difficulty, and could not but cause an intense degree of interest, not free from apprehension, amongst us. The continuous foggy state of the weather had prevented us from obtaining such accurate observations as could be relied on, and the sun being almost constantly obscured, we had but little to inform us of our progress, except the log line. Guns were fired at frequent intervals to warn any ship of our approach, and as the chart of this sea was considered more or less

imperfect, the greatest care and vigilance were had recourse to on board to watch for aught that might indicate an approach to land: under these circumstances we still fearlessly stood on. On the morning of the 27th, King's Island was faintly visible about eight miles distant, where we found a strong easterly current setting into Norton Sound. We altered course a little more to the westward, to keep clear of the land; the soundings varied from twelve to twenty-five fathoms, fine mud, and broken shells—the first time the latter were met with. At 11 p.m. still surrounded by the same impenetrable fog, and still speeding onward in the darkness, we suddenly passed through a strong tidal race into a smooth water, which from the noise caused by the opposing wind and current, gave one the idea of its being a well marked watery barrier existing between two different seas. On the following morning, Sunday, July 28th, at seven o'clock, we quitted the northern limit of the Temperate Zone, crossed that of the Arctic Circle, and entered the waters of the Polar Sea—an event joyfully hailed by every soul on board. We were now favoured with a clearer atmosphere than we had known for many days, which was also less moist, and although cold was pleasant and agreeable; the sea had likewise assumed a most tranquil aspect, and we had thus entered on our new domain under auspicious appearances at least.

In the course of the day we exchanged colours with two American whalers, which were apparently full and homeward bound. Several whales were also seen spouting at a distance, and the *crang* of one, (the name bestowed by the whalers to what remains after the blubber has been removed) floated past us, on which myriads of sea birds were regaling themselves. We were subsequently afforded ample evidence of the number of these monsters frequenting this sea, which enables us to testify to its excellence as a cruising ground for whalers; and this is, I believe, entirely in the hands of the Americans. The temperature of sea-water on entering the Polar Sea, fell three degrees in four hours, remaining a few tenths above freezing point, which led us to expect an early appearance of ice, that of air 41° . Depth of water varied from seventeen to twenty-four fathoms.

On the 28th, still favoured with a light south-easterly wind, we shaped a course for Cape Lisburne, the proposed rendezvous, which then bore N. 25 E. 51 miles distant.

The first issue of the warm clothing supplied by Government for our use, was then made; embracing one complete suit of blue double milled box cloth, boots, stockings, boot-hose, comforters, mits and caps; all of excellent quality, and well adapted for Polar service, of this I shall have occasion to speak hereafter.

The days had now attained such a length, that at the hour of midnight we had very good twilight,

the sun being but a short time below the horizon. At 5 p.m. a sail was observed, bearing down towards us, which we soon recognized, gladly welcomed H.M.S. 'Plover,' and immediately communicated. She could afford us no tidings of our Consort, having just returned from the ice, which she sighted on the 27th, and afford us a most unfavourable account of its state and condition, it being quite impenetrable. As she had viewed it some three or four miles distant, not deeming it prudent to make a nearer approach, we were nothing daunted by the report, but indulged in the hope that the reality of matters would prove less appalling than the description. We took advantage of her presence to forward our last letters and dispatches for England, then parted company, and proceeded on our course. They informed us that they were regularly supplied by the natives with reindeer and birds, a large number of which was suspended from the rigging, but we were not afforded an opportunity of verifying their opinion of the excellence of such diet.

Our men were now daily employed in occupations novel to many, in putting in order, and preparing all necessary implements for ice navigation; ice anchors and chisels, hatchets, saws, whale lines, &c., were all duly overhauled and got on deck in readiness for use. The crow's nest had been hoisted to its aerial position, at the fore-top-gallant mast head. This well known emblem of Discovery ships, and of others

employed in the navigation of icy seas, from the novelty of its appellation may, for the unprofessional reader, require a short description. It is in form like a barrel, from which it is generally constructed, with a trap door at the bottom sufficiently large to admit one person, and is hooded over at the top with canvas, so as to afford protection from the wind to its occupant, who is generally the ice master or mate: from this position his observations are made on the state of the ice.

The number of birds appeared daily on the increase as we advanced, driftwood was observed also in greater abundance, and the sea appeared full of animal life; I had the dredge overboard, and added to my collection numerous specimens of the Crustaceous and Accephalous animals.

On the morning of the 31st, when about twenty miles distant from Cape Lisburne, a sail was observed to the N.W. standing down towards us, when opinions were freely hazarded as to the probability of the stranger proving to be our long lost Consort, or otherwise. The question was decided as the gay ensign of St. George was unfurled to the breeze, and her number simultaneously flew at the mast head, which speedily informed us that H.M.S. 'Herald' was about to join us. We soon closed, and as she rounded under our stern in good style, she manned her rigging, and welcomed us with three hearty British cheers, and one cheer more, to the Polar Sea—a compliment we immediately returned, and pro-

ceeded in company towards Cape Lisburne, then visible. Captain M'Clure presently went on board, but soon returned accompanied by Captain Kellett and some of his officers, who manifested a great desire to afford us every facility to our onward progress; and offered all the assistance it was in their power to give, as far as the 'Herald's' resources would allow. We gladly availed ourselves of their proffered assistance by completing deficiencies in our stores, and as we were still three men short of proper complement, we received an equal number of volunteers—strong muscular looking fellows, apparently well suited for hard service—and as we could have no hope of meeting with another ship, we dispatched a few hastily written letters—our last—to England.

We learned with regret that nothing had been seen or heard of our Consort, and having now arrived at the rendezvous, there could exist no doubt that she was still far distant behind us. Captain Kellett informed us that it was he who advised Captain Collinson to pursue the course which I have before narrated, and which he himself had done for three successive summers, the average passage being fifty days to Cape Lisburne. It could not, therefore, for a moment be supposed, that the 'Enterprise,' (a much slower sailing ship than the 'Herald,') could even, under the most favourable circumstances, have made the passage in much less time; nor did any of us

believe it possible for her to have done so, despite *the* opinion that was then advanced to the contrary.

We received no orders from our senior officer (Captain Collinson) as to our course of action in the event of reaching the rendezvous before him; the possibility of such a contingency occurring, evidently had never been for one moment entertained. We were consequently obliged to adopt a course of action for ourselves. One of two only were left for us to pursue—either to remain at the rendezvous until the arrival of the ‘*Enterprise*,’ with the uncertainty of then meeting her, owing to the foggy state of the weather, and thus lose the season in the ice; or at once proceed to the northward, and enter the ice single-handed. We resolved on the latter, and cheerfully prepared to encounter all obstacles and dangers, with a firm reliance on a merciful Providence, and full confidence in our resources. Never did any body of men enter on a hazardous enterprise with stouter hearts or finer spirit than the brave crew of the ‘*Investigator*’ then manifested, and maintained throughout every subsequent stage of our eventful voyage.

Captain Kellett, although the senior officer present, did not feel himself justified in detaining us. From this date, we formed an expedition in ourselves, and parting with the ‘*Herald*,’ after an interchange of complimentary signals, stood in for Cape Lisburne—the ‘*Herald*’ still in company astern of us.

Cape Lisburne is a fine, bold headland, some 800 or 900 feet high, and is well represented by the sketch in the published chart of this locality. It is of limestone formation, with a range of hills extending to the eastward; is conical in form, with a line of stratification dipping at an angle of about 15° in a south-eastern direction; but the more permanent headland had the line of stratification nearly horizontal. The hills were all surmounted by a mass of loose grey scoria, and were separated from each other by partial gorges, which sheltered on either side, presented an appearance of verdure that contrasted pleasantly with the general barrenness of its aspect. On the top of the most elevated headland, which is likewise the most southerly, a number of conical-shaped points or pillars were discernible, partially enveloped in mist, with masses of snow strewn about; and this, from its fine bold appearance, may be considered the Cape. To the southward, the low, sandy promontory of Point Hope could be seen, running parallel to the range of hills extending eastward from the Cape, and between which a fine bay intervened.

Our object in thus approaching so closely to Cape Lisburne, was with a view of ascertaining if a cairn, or any other landmark, had been erected that might in any degree affect the resolution we had arrived at, of proceeding onwards to the ice; but nothing was visible to afford any indication that it had been visited at any period either recent or remote. We, therefore,

shaped a course at once for the ice, and stood away to the N.W. $\frac{1}{2}$ W., with a fine fresh north-easterly wind. The 'Herald' still kept ominously astern, which did not at all contribute to our comfort; for, it may now be confessed, we still feared that Captain Kellett would detain us, and that on reflection, he might see the necessity of keeping us at least some days to await the chances of our senior officer's arrival; but *as the truth must be told*, an opposite state of the case was urged on him. Captain M'Clure maintained that the 'Enterprise' was a-head of us, and in support of which, retained the private letters he had for Captain Collinson *for early delivery*. The impossibility of such being the case I have already shown—of course, no person could truly entertain an opinion to the contrary, and I am sure Captain Kellett had too much sagacity not to see the true state of things. This I must confess we all rejoiced at, as we were anxious to get on, from a general feeling entertained that our Consort had neglected us. But he was evidently unwilling to assume the responsibility of detaining us.

Our worst fears were excited however, when in the evening we saw the 'Herald' make all sail towards us, and rapidly closing from her superior sailing qualities, she made a signal recommending us to wait forty-eight hours for the 'Enterprise,' to which Captain M'Clure signalized in return, "*Important service. Cannot on my own responsibility!*"

This not being clearly understood, Captain Kellett

hailed from the poop, desiring us to repeat the signal, which was accordingly done. She then gradually dropped astern, made no further reply; and at 11.30 p.m., she tacked and stood in for Cape Lisburne. This afforded us an inexpressible degree of relief, as we then considered ourselves free from all control, and the object sought had been attained. Such is a truthful narration of the circumstances attending the bold project conceived and acted upon, of entering the ice alone, an event hitherto viewed by Arctic navigators with the greatest apprehension, and one which is certainly attended with extreme risk as well as great danger. Hence two ships have always been sent on Arctic Expeditions, for mutual succour and support, and for the salutary controlling influence, no less than the social effect they cannot fail to exercise on each other, when in company. Our expedition, from the period of leaving England, was not a combined expedition, as may be seen from the foregoing pages, although the Admiralty orders admitted of but one interpretation on the subject, which ran as follows:—"We deem it right to caution you against suffering the two vessels placed under your orders to separate, except in the event of accident or unavoidable necessity."

Notwithstanding the positive nature of these orders, 'Enterprize' left us twelve days after leaving England; and it was by the merest chance we caught her in the Straits of Magellan—it being her intention to sail the following morning. Hence we could feel

but little regret at losing the company of a Consort that had hitherto proved so faithless. She manifested a desire to get rid of us altogether, by taking the 'Plover' with her into the ice, in lieu of her legitimate Consort, had she arrived before us. Under other circumstances, her loss could not but be a matter of regret to us ; and I am sure I truthfully represent the feeling entertained by my late mess-mates—the officers of the 'Investigator,' when I state, that for Captain Collinson and his officers, we had learned to entertain feelings of esteem and regard, from our intercourse when fitting out the ships. The special character of the service, the mutual interests existing, and that strong feeling which ever exists amongst men engaged in a hazardous enterprize, had strongly bound us together, and it was to us a matter of regret throughout the voyage, that the conduct of our Consort was so much at variance with the kind feeling existing between the officers of the two ships. In support of an opposite view of the case, it may be stated that ships make a better passage when not in company, which I am not at all disposed to admit as a rule ; but assuming it were so, it could not in our long voyage have made a difference of more than a few days. This is a trifling circumstance, when compared with the good results likely to accrue from that hearty co-operation and mutual support, which ships in company can afford to each other ; and its necessity in Polar

Service, had been hitherto fully understood and appreciated.

We were all, therefore, naturally much elated at the singular good fortune that had befallen us, in having made one of the fastest passages on record from the Sandwich Islands to Cape Lisburne (twenty-seven days); and despite the many misfortunes we had met with, not only to have done all, but more than all, that was expected from us. We had now attained a position which the Admiralty, and the most sanguine of our friends in England may have ardently wished for, but there existed little prospect of its being so literally fulfilled as it was on the 1st of August. We therefore indulged in the hope that, with such favourable prospects before us, and so timely an arrival in the Polar Sea, we could not fail to do much towards advancing the object of our noble expedition.

On the 1st of August, the breeze had freshened to the force of a gale, and was not quite favourable for us; but towards morning it had entirely subsided, with every indication of fine weather. All were anxiously looking out for the first appearance of the ice—the crow's nest, therefore, was seldom without an occupant; and as daylight was then persistent, there was no period of darkness to interrupt our view, or the anxious interest we felt. The hour of midnight came, but one felt but little inclination to seek repose. This was to me, the most enjoyable

period of the day—all work on board had, of course, ceased—everything was still and quiet—the watch only on deck reclining leisurely about, ready for action at a moment's notice; all, in short, hushed to silence, save the low murmuring of the wind, and the wash of waters from the ship's progress: it was therefore difficult to conceive that midnight had arrived.

As the sun approached the horizon, towards midnight, the aspect of the heavens was truly beautiful, when at twelve o'clock, his lower limb partially dipped, and again slowly ascended on his course; or rather, our orb revolving on its own axis around him. The sky to the eastward, at the time, presented a most splendid appearance—a wide belt of refracted light extending along the horizon, resolved into its prismatic colours, imparted a degree of beauty to the heavens I had never before witnessed, and from the gorgeous and brilliant yet varied tints of colouring so wonderfully displayed to view, could not possibly be surpassed. The moon, at the time, was rising slowly in the same quarter, but quite obscured by the surpassing brilliancy of the novel and beautiful phenomenon I have mentioned, which can only be seen in this way in the frigid regions of the north.

CHAPTER IV.

Enter the Ice—Its Appearance, &c.—Walruses—Progress and Incidents—Currents—Temperature—Approach the Land—Meet 'Plover'—Esquimaux Graves—Point Barrow rounded—Position and Appearance of Ice—Tides and Currents—Aspect of Ice—An Icy Scene—Cruising in the Pack—Difficulties and Incidents—Regain the Coast—Its Difficulties and Dangers—Boats towing—Encounters with the Ice—Reflections—Ice and Water—Character of former—Sunset over Ice—Point Drew—First Interview with Esquimaux—Their Visit to the Ship—Incidents—Barter—Women—Boats—Incidents and Character of Esquimaux—Visits from several Tribes—Approach Point Pitt—Landing—Deposit a Record—Mounds—Ship grounded—Difficulties of our position—Cohille River—Jones's Islands—Visit to them—Esquimaux—Interview—Incidents—Thieving, and Visit to the Ship—Means adopted for recording our Visit—Progress—Temperature of Air and Water.

At six o'clock on the morning of the 2nd of August, "ice a-head" was reported from the crow's nest—soon after which many an eager eye was directed to the white line, then visible on the northern horizon ; and as we advanced towards it, the sea presented an

aspect truly novel to the majority of us, as the detached masses of ice, in forms the most picturesque, were majestically floating down in our direction. As we stood on, the breeze gradually became much lighter, and the temperature fell several degrees—that of air to 35°. The masses of loose ice became more numerous, and in proportion considerably greater than before. Large pieces coming in our course were cleft by the ship, producing a slight shock, a grating noise, and an equally strange sensation amongst us, as the fragments having been partially submerged, were dashed on either side, while the breeze bore us steadily along.

The main pack soon became visible; and chilling as was its aspect, I am not sure that we did not hail it with a cheer. It was reached about noon, in lat. 72° 1' N., long. 166° 11' W. And thus were all our ardent hopes at length realized, which caused a degree of cheerful excitement amongst us not easy to be described. It certainly presented a formidable appearance, for this lofty, impenetrable barrier extended across our path in a line from N.W. to S.E., much heightened by the refractive power of the atmosphere, together with the uniformity of surface which ice generally presents from the fragments not being entirely clear of each other, although it may be quite navigable, and what is termed loose-sailing ice. This, however, can only be determined on by a near approach. We continued tacking to and fro in loose

ice until the edge of the pack was reached, which was much more distant than we at first supposed. The mass had lost nothing of its heavy impenetrable character on actually reaching it. The wind having become light and variable, as we had got into one of the innumerable indentations of the pack edge, we might have some difficulty in extricating ourselves, were it suddenly to change to the southward. It was, therefore, considered judicious to work the ship out again; and for the rest of the day we continued tacking along its edge.

We were surprised by seeing numerous herds of Walruses (*Trichechus Rosmarus*) grouped together on the large detached masses of ice, drifted off from the pack, apparently asleep or basking in the sunshine. The novelty of a sight so unexpected was gladly welcomed, and various and amusing were the opinions given by the men who had never seen them before, as to what they could possibly be, while they gazed in mute wonder and amazement at the strange sight before them. They did not exhibit any feeling of alarm as we approached; one or two could be seen dropping into the water, but it was not until we had got within a few yards of them, that, as if by preconcerted signal, they rolled or tumbled into the sea, and for a time became invisible. They appeared to live in perfect harmony, and as they lay huddled together, a lazy listless air characterized the whole. I could not but admire the affection displayed by the dam for her young,

which were crawling on the maternal back as we approached; but the moment the mothers perceived the danger, they seized them under their arms and disappeared; nor did we see them again at the surface, until there existed no cause of alarm. We might readily have shot or captured several, and a six pounder gun was loaded for the purpose, but was not fired—one was, however, wounded by a rifle ball. The meat of these animals is excellent, called by the old sailors "*marine beef*"—a supply of which would have been not only acceptable, but very beneficial to our crew; and we regretted our not delaying a little for what might have been so easily obtained.

For the next few days we continued following the trending of the pack in loose sailing ice, in an east or south-east direction, in the hope of our turning its southern extreme, and thus making way to the northward; but numerous were our disappointments, as taking advantage of every opening that was presented, we followed its course only to be arrested by the impenetrable pack, at the bottom of the deep indentations so frequent along its edges.

At times we came heavily in contact with detached pieces through which the wind did not enable us to force our way. On the first occasion when it became necessary to send some of our men on the ice to assist us, great was the rivalry manifested as to who should first touch its surface; but after a considerable display of agility, the honour was

claimed by the Boatswain. The Walruses were still very abundant, but as we proceeded to the eastward gradually disappeared; the depth of water which they frequented varied from 24 to 37 fathoms. Since leaving Cape Lisburne, we ascertained that a current set N. $\frac{1}{2}$ W. about fifteen miles in twenty-four hours; and it became a question amongst us, how far it would aid us, were we to proceed along the northern shores of Siberia, and make our exit from the Polar Sea *via* Spitsbergen; but we had no intention of trying the experiment, indeed, even at that early period of the voyage, freely indulged and expressed the hopes we entertained of quitting Polar Sea by the more legitimate route of Barrow's Strait and Baffin's Bay.

On the evening of the 3rd, the temperature fell to freezing point for the first time. Throughout the day it varied much, together with sea water—from eight to twelve degrees. Light ice formed on deck and in the rigging; although the navigable season in these regions is considered to commence about this period, and in some seasons even much later.

From the general state of the ice, and the frequent abortive attempts we had already made to get to the northward, that had cost us much time and trouble, it was determined to pursue a course towards the American coast—thus, following the trending of the pack edge, round its southern extreme, there being every probability from the direc-

tion of the winds, that water intervened between it and the shore.

On the morning of the 5th, it blew a gale from the south-west, which soon brought us in sight of the coast. About the same time a sail was observed on our weather beam, standing to the westward, and although the morning was foggy, she was sufficiently near to enable us to recognize and exchange numbers again with the 'Plover;' but we were too anxious to take advantage of the fair wind, to stop to communicate. She was, doubtless, cruising in expectation of the return of her boats, which she had previously informed us had gone along the coast, with a view of ascertaining the truth, concerning a rumour they had heard, of a party of white men being engaged in building a boat on the coast to the northward, subsequently found to be incorrect.

We soon approached the land, that presented the appearance of a continuous bank of shingle, having an outwork of dark rocks here and there along the water's edge, near one of which on the coast north-east of Point Franklin, (that takes its name from the brave and gallant officer of whom we were in search,) we observed several mounds, into each of which poles were inserted; to account for this strange appearance our ingenuity was severely taxed. At first, we supposed them to indicate provision depôts, but the interpreter pronounced them to be graves, it being the custom of some tribes of Esquimaux to

mark their places of sepulture in this manner. We were then pursuing a north-east course running for Point Barrow, having previously sighted the Sea-Horse Islands, and the various points of coast laid down on the chart. At this time high, indeed, were our expectations, and ardent our hopes that ere many hours could elapse the dreaded Point Barrow would be rounded in safety. The passage around this well-known and remarkable feature of the coast, had been but recently pronounced impracticable for a ship, by Commander Moore of the 'Plover,' in a published dispatch to the Admiralty, the accuracy of whose observations and judgment we were then about to test.

At 1 P.M. the ice was reported from the mast-head, as extending right across our path, but sufficiently loose to sail through. On approaching we found it a stream of floe ice detached from the main pack, but forming an ineffectual barrier to our progress. We entered it with a fine breeze, and a crowd of canvas, and after receiving sundry hard knocks, and inflicting destruction on all the decaying fragments that came within our reach, we again entered clear water, and altered course more to the northward, following the line of ice.

During the remainder of the day, we were sailing through a field of loose ice, but as the breeze had fallen light, our progress had much diminished since the morning. We anxiously looked out for the land, which we had previously lost sight of; towards mid-

night, it could be discerned from the mast-head; the low Point Barrow far in the distance, but still indistinct from the fog then rising on the eastern horizon.

We had on this day felt considerably the effects of the tides or currents, and in clear water streams could be observed well defined by a rippling outline. The latter appeared to set at times in different directions S.W. and N.W., and at 8 P.M. we found it setting steadily to the south at the rate of two miles per hour; doubtless influenced much by the physical aspect, not only of the land, but likewise of the numerous projecting points or promontories, and also the indentations that the widely extended ice pack everywhere presented; between which and the land, and through a highly picturesque field of loose ice, a light breeze from the westward still bore us along. Several Whales (*Balæna Mysticetus*) and Seals (*Phoca Vitulina*) were seen during the day, and soundings varied from 14 to 73 fathoms in mud and sand, with broken shells at intervals.

Throughout the night we had kept away to the N.N.E. and more off the land, which, early the following morning, (the 6th) was still faintly discernible. Sailing through loose ice with a tide or current at the same time setting us to the northward, with greater force than was observable, we found ourselves by meridian observation in lat. $71^{\circ} 35' N.$, long. $155^{\circ} 12' W.$ We were thus farther to the

northward of Point Barrow than we intended to go, and to our great joy, had successfully rounded this hitherto much dreaded point of coast, the alleged impracticability of which we had then fully refuted. The 'Investigator' then floated in strange waters, where no ship had ever preceded her, and commenced the navigation of a hitherto unknown and unexplored sea.

The wind had entirely forsaken us as the day advanced, and we lay becalmed, surrounded on all sides by loose ice, in which there was every probability of our being beset, should a fresh breeze from the south-east not come to our rescue.

The position from whence these fears were entertained, could scarcely be supposed to have existence in the frigid regions of the north, from the picturesque beauty and loveliness of the scene which then met the eye; but when I say that ice and water alone contributed to form the landscape, it must be equally difficult to fancy that these elements could so closely imitate true lacustrine scenery. We lay with all our canvas set, hanging sluggishly from the yards on the glassy surface of a sheet of water some two or three miles in diameter, apparently ice-locked. The sun shone forth brilliantly, imparting to us all, the delightful warmth of his rays, and to the icy regions in the distance, that peculiar splendour produced by their reflective power in a highly refractive atmosphere. Masses of snow-white ice, in form

resembling little islands were interspersed around, with intervening spaces of water. Numerous as they were, there was light sufficient to display the outline of each as they floated motionless on the surface of the sleeping sea, with the distant and uneven pack all around, forming a land-like but ice-locked boundary, resembling one of our own northern lakes in its wintry garb. There a vivid imagination might readily have taken a flight far from the Polar Sea, in contemplating the icy scene which surrounded us, the novelty of which was only surpassed by its beauty.

We were then fairly in the pack, with a sea of loose ice floating everywhere around, as far as the eye could reach from the mast-head. It was our object to make the land again if possible, and the obstacles which then presented themselves were of no ordinary nature. A light air had sprung up from the southward, that compelled us to tack to and fro in the narrow channels between the floes. It soon afterwards freshened considerably, and ultimately increased to the force of a moderate gale from the south-east. Our situation then became very critical, as the wind blowing off the land, and aided by currents, brought all the loose floe ice rapidly down on the main body, in which there was but too much reason to fear we might become beset. We, therefore, took advantage of the breeze, and stood on our course to the E.N.E., through heavy, loose fragments, but were soon obliged to tack to W.S.W, owing to the obstruction

offered by a great field of impenetrable ice, which, to have come in contact with, might have been our destruction. We continued working the ship close-hauled, alternately to the N.E. and S.W., endeavouring to make the land, and get clear of the perilous position in which we were placed, from the rapidity with which the ice was then setting down on us.

It was quite appalling to observe immense flocs coming on towards us, as we sped our way through the narrow channels of water that separated them from each other; some of which were almost magically closed as we approached them by the junction of these ponderous masses, propelled onward as they were by the united power of wind and currents. It became, therefore, a matter of no small consequence, not only to direct the steerage of the ship, but demanded the utmost alacrity and expertness in working her, as the delay of a moment might have been attended with consequences fearful to contemplate. We had the most convincing evidence how formidable was the character of these huge floating masses, and what the result would have been, either of striking them, or, still worse, of being caught in their embrace. Some fragments it was impossible to avoid, and, as the ship struck them from time to time, the shock was tremendous, and vibrated through every timber of her solid framework—even endangering the safety of the masts; and it was only by an effort, that any one could maintain his equilibrium on deck. Towards midnight

our satisfaction was great, on finding ourselves in more open water, and in observing the floes less numerous. At this time the loom of land was reported from aloft. The force of the gale had evidently passed. During its continuance, accompanied with rain and sleet, it imparted an appearance of grandeur and wildness to the scene difficult to conceive; but so perfectly ice-locked were we, and so circumscribed was the area, that it could not exercise its power. Its surface was barely moved by a ripple; and anxiously did we watch for the slightest swell of the sea, or heaving of the ship, as evidence of our approaching the open water.

In the course of the following morning (the 7th), the wind had quite died away, leaving us again becalmed, and surrounded by heavy ice still drifting to the northward. This was considered favourable, as we hoped to find a greater space of water in shore, and to reach it were making the most strenuous efforts. All our available boats were at once called away to tow—the first time we had recourse to this tedious operation—there being only a few men left on board to work the ship along the narrow and tortuous channels through which we wended our way. All cheerfully lent their aid, wherever it could be available, to facilitate our progress, and free us from our difficulties.

The boats were of great service, and never did men work with more zeal or energy. It was quite delight-

ful to see each boat's crew exciting the other to increased exertion, when they saw the slightest appearance of the stroke of the oar being less vigorous than before, by some amusing, jeering observation, generally received with a loud laugh, or a hearty cheer. Nor were we less occupied on board, it requiring the exercise of all our skill, not only in the steering, but in tacking and trimming almost incessantly to keep clear of the ice, with which, despite our best efforts, we frequently came in contact. We thus continued our slow advance throughout the day, when at 8 p.m., the low land of Point Drew became visible to the N.N.E., five miles distant; and about two hours later, we had cleared the limit of the ice, and joyfully hailed our return to the coast, between which and the ice there was then a considerable space of water.

There was now a universal feeling of pleasure experienced as we found ourselves thus far in an unknown sea, having escaped from the perilous position we had been placed in during the few preceding days; and as it was the first time we had come in actual conflict with the foe, we had good reason to be pleased with ourselves.

It was generally remarked that the character of the ice was much more heavy than that generally met with on the eastern side of the Polar Sea. A few small icebergs were met with, formed in a great measure from packed ice, that seldom exceeded thirty or forty feet in height, floating amongst the floes.

Since rounding Point Barrow the water gained in temperature, but steadily decreased in density, having fallen from 1012 to 1008 in twenty-four hours, as we approached the land; and it had likewise become brackish and discoloured from the admixture of fresh water flowing from the numerous tributary streams along the coast. As the sun touched the icy horizon towards midnight, he presented the most splendid appearance I have ever witnessed, and one on which the naked eye could barely for a moment rest, owing to a dazzling brightness surrounding the disc. It was free from those gorgeous and varied tints I have previously noticed, and now presented one vast sheet of silvery flame, illumining the horizon with a degree of magnificence to be seen in no other region of the world. It is one of those compensating sights icy regions alone can furnish, as the beautiful effect was entirely produced by the reflection of the sun's ray's from its snow-white surface.

About one o'clock on the morning of the 8th, having reached within three miles of the shore, the depth of water being then only five fathoms, it was not considered judicious to go much nearer. It was then resolved to record our arrival off this part of the coast, and erect a landmark on the most prominent point. Accordingly, Mr. Court (second master), myself, and the interpreter were despatched in the third whale-boat for this purpose. The morning was cold, clear and fine as we approached the land,

when, about a mile distant, we saw an object which we thought was a beacon, and pulled steadily towards it. Presently a second appeared in sight, and subsequently a third, which left no doubt on our minds that we were approaching an inhabited land; but whether these objects were Esquimaux, or some of our lost countrymen, created a feeling of extreme anxiety amongst us, and our men gave way at their oars even more lustily than before, that the question might be speedily solved.

This was soon accomplished to our entire satisfaction, by the three figures suddenly taking to flight, which left no doubt of their being Esquimaux; we therefore prepared ourselves for this our first meeting with these people, not knowing whether it might assume a friendly or hostile aspect. The poor creatures still continued their flight, occasionally stopping, in evident amazement not only at our approach, but apparently still more so at the 'Investigator' in the offing; until, in one of their pauses, we stood up in the boat, and held up our arms—the usual sign of friendly intentions amongst them. We had no sooner done this than they assembled evidently in consultation, and answered the signal without delay, remaining stationary.

We at once landed, and having called out to them words of peace in their own language, we approached; they timidly met us, and in a few minutes we were rubbing noses—the customary mode of friendly

salutation with them—about the most filthy race on the face of the globe. We won their hearts by presenting a little tobacco, and then commenced conversation. They were cheerful and good humoured, answered questions readily, but could not keep their eyes from the ship, which was to them an object of the greatest wonder. They had no word in their language to express an object of such magnitude, and from seeing her move, thought she was a great living island. From the time of being seen, the 'Investigator' had caused extraordinary consternation amongst the tribe, encamped but a short distance, as they said, from where we were.

We could not obtain much satisfactory information regarding the ice, owing to their inability to compute time, and their having no more knowledge of its periods than what is expressed by the cold and hot season; but we understood there would be open water on this part of the coast for two moons. They had seen the boat party from the 'Plover,' the previous year, on its way to the Mackenzie—and this was all the information we could obtain; no other white men had been seen on the coast. Their trade is carried on through another tribe of Esquimaux, with the Indians, who are in direct communication with the Russian Fur Company; but they had never seen any people like us before. They had only been there a few days, having come a journey of five days duration from the south, as they leave the coast on

the approach of winter. They were very anxious we should visit their encampment, and offered to procure us reindeer meat, some of which they had with them; but our taste for venison became suddenly impaired, as one of them drew a piece from his breast, that had been in contact with his skin, and offered it to us to eat. Time did not admit of our visiting their abode.

Having erected a mound, in the centre of which we placed a pole, and deposited a bottle with a record of our proceedings, ten feet to the magnetic north; a gun from the ship told us of their impatience for our return, that advantage might be taken of a light favourable breeze which had then sprung up. We bade the Esquimaux a friendly adieu, and invited them on board—some of our men again indulged in their taste for rubbing noses, evidently fascinated by its novelty.

Point Drew is a low flat promontory, the soil blue clay with a stratum of fine peat superimposed from ten to twelve inches deep; it was found frozen about fifteen inches from the surface. The country appeared generally flat, but covered with a rich luxuriant pasturage, with occasional pools of water interspersed over its surface, and is no doubt frequented largely by reindeer. On reaching the ship, we were much surprised to find a 'baidar' or native boat alongside, and several Esquimaux on board, both men and women, who had arrived during the period of our absence. They

were a lively party, appeared wonderfully surprised at what they saw. Nothing seemed to excite their admiration so much as the gong which was beaten for their amusement; and some of them went up the rigging quite fearlessly as if accustomed to it. We distributed presents amongst them consisting of knives, scissors, beads, and tobacco; they gave us in return a few skins, and some articles of dress, coats, mits, &c. Bows and arrows, with barbed ivory spears, appeared plentiful, and with that ardent desire for novelty which sailors ever exhibit, they met with ready and liberal purchasers. They took their departure evidently much pleased with their reception, having promised to be friendly to any white men like ourselves who might visit their country. The bidars appear well adapted from their lightness and buoyancy, for river or shallow water navigation, such as the coast presents. They are flat bottomed, constructed something in the form of a yawl, with skins from which the hair has been removed, over a frame work of wood—when this cannot be procured whalebone is substituted. They are in length about twenty-four feet, with a breadth varying from three to four, with seats across as in our own boats. They manage them with much skill and dexterity, and the paddles which are always in the hands of the women, propel them with great celerity through the water. They had not long left us when a second party came alongside to barter, but were much more timid than

the others—even appeared afraid to trust themselves on board; however a little persuasion soon overcame their apprehensions, and a brisk trade was at once opened, in which they displayed great acuteness and tenacity in making bargains. We made them several presents, and they left us, perhaps, as little favourably impressed with us as we were with them, as they evinced nothing whatever of a friendly character; the desire of gain alone appeared to influence them.

The wind being very light, our progress was consequently very slow; and, for the remainder of the day, several baidats came off to the ship, full of people who stepped on board most unhesitatingly, as if accustomed to ship visiting. Traffic was evidently their object, which was maintained with great activity. Tobacco and knives were the articles most highly prized. It was singular to witness the avaricious spirit they manifested on all occasions; nor did they care to acknowledge on our part the right of ownership—numerous and amusing instances of which occurred. One of them, observing the Captain's back towards him, adroitly attempted to pick his pockets, but was caught in the act, and duly admonished, I fear with but little effect. Another, having sold a deer-skin to one of the officers, observing where it was placed with other articles he had purchased, watched the moment when we were all engaged, and re-sold it to the sergeant of marines, on whom, I believe, a similar trick was played; and

ultimately it passed into the hands of a third party. Having been thrice sold at more than treble its value, it had realised a handsome profit for its owner. The circumstance was not discovered until the two first purchasers came to look for their property, which afforded much amusement ; and the boats having previously left, there was no redress. Indeed, we all required to exercise the utmost vigilance, as the Esquimaux made every possible attempt furtively to regain what had previously belonged to them ; and no doubt could exist as to their strong thievish propensities.

The women had their infants with them ; but a casual observer would fail to discover them. Their presence was only revealed to us, when the mother carelessly untied a cord which encircled her waist, allowing something, which we supposed was an article for barter, to slip down her back, and lifting the short jerkin which covered her body, seized it with the right hand, drawing forth by the feet a naked infant ; adroitly giving it a turn, she placed it on her knee, and covered its body with a little fur jacket similar to her own. The poor little thing could not have been more than six or eight months old. It never cried in the least at this rough usage, but sat in perfect quietness on its mother's knee ; and how it remained there I could scarcely conceive, for in the eagerness of barter it was entirely unheeded. In due course, the infant was divested of its little covering, and placed in its former

position on the mother's back; the cord tied, and no further evidence of its presence could be obtained, except when its little head occasionally protruded from its hiding-place.

There was one baidar which contained women only, several of whom came on board, looked about attentively, but gave little external evidence of surprise. They had an animated and more intelligent expression than we had seen others of their sex possess, added to a great display of cheerfulness, conversing in a most lively manner amongst themselves. Being desirous of ascertaining their stature, they readily submitted to my measuring them, which appeared to afford them much amusement. They were tattooed on the chin, having a vertical line about half an inch broad in the centre, extending from the lip, with a parallel but narrower one on either side of it, a little apart. Some had two vertical lines protruding from either angle of the mouth; which is a mark of their high position in the tribe. Their hands, notwithstanding the great amount of manual labour to which they are subject, were beautifully small and well-formed—a description equally applicable to their feet; and their teeth, white and regular, were displayed to considerable advantage in the hearty laugh in which they frequently indulged. As these women formed a party of themselves, unaccompanied by men, they demanded all our politeness and gallantry. We made each of them

presents, with which they seemed much pleased. One of them was good enough to present me with one of their Fetishes, an ivory badge which the Esquimaux ever carries with him in his hunting and fishing excursions, as the only power they acknowledge of being able to afford them success; for, I regret to say, they are utterly ignorant of the existence of a Supreme Being. It is about four inches long, and has generally some rude carving of birds or animals on it. They left us with every demonstration of friendship, and paddled their baidar with great alacrity to the shore. We observed that the knives they had were made out of files, which we presumed were obtained in trading with the Indians. Some of the men had labrets, a disgusting ornament worn on the lower lip.

The wind still remaining light and unfavourable, we continued working the ship to the eastward, between the ice and the shore, in water varying from five and a half to three fathoms. The latter could not be approached within two or three miles, as the ship's draught of water was upwards of fifteen feet. The difficulties of the navigation may be easily imagined, we having no charts with the soundings marked to guide us; the ice on one side, and the lead-line on the other were all that we had to depend on.

At 8 P.M., when working up for Point Pitt, which bore S.S.E., $\frac{1}{2}$ E. the ship took the ground, the water

having suddenly shoaled to two fathoms and three-quarters, and plentifully stirred up the mud. As it was a soft bottom, unpleasant as our situation was, we expected to have her soon afloat again. The only thing to be feared was, a sudden change of wind, bringing the ice down, which was then ominously frowning on us, at no very great distance. Anchors were laid out as expeditiously as possible, and hove on with all our available strength at the capstan; and we presently had the gratification of seeing our efforts attended with success, and the ship again in motion.

As we approached this point, several conical-shaped mounds were observed, resembling cairns, standing out in bold relief, with a fine clear sky for a background, leaving no doubt in our minds as to their artificial origin, when contrasted with the uniformity of the low, flat surface everywhere around. When about three miles distant, Lieutenant Cresswell and myself were despatched in the second whale-boat to examine them. On reaching the Point, we found it detached from the mainland, a narrow channel separating them, the soil rather swampy, and vegetation less luxuriant than elsewhere. The mounds that presented such a lofty appearance at a distance, gradually diminished into comparative insignificance as we approached, and proved to be small heaps of earth about three feet high, which the refractive power of the atmosphere had increased to about forty feet.

On examination, they proved to be nothing more than Esquimaux store-houses for the products of the chase, containing the bones of animals, with other evidence of the locality having been at one time their resort. Old traces of encampments still existed in many places.

A mound of earth was erected, in the centre of which we placed a board with the broad arrow painted on its surface, and a record of our visit deposited ten feet to the magnetic north. While this was in process of erection, I proceeded to the opposite side of the point, where I found an indentation of the coast, forming one of its numerous crescentic-shaped little bays. I was surprised at the vast quantity of driftwood accumulated on its shore, several acres being thickly covered with it, and many pieces at least sixty feet in length, the trunks of fine trees. I made a hasty examination with a view of discovering any remains of a boat or wreck, but without success. Our work being completed, we reached the ship in safety soon after midnight. Our return was rendered pleasant by contemplating the magnificent appearance of the sky to the westward, tinted as it was by the most brilliant crimson I ever beheld.

In the next few days, the difficulties of the navigation were much increased by the addition of fog, together with foul wind and currents. We had not even the land always in sight; yet we crept along, reached Harrison Bay on the 9th, when the altered

appearance of the water, which had nearly lost its saline character, having only a density of 1000, told us of our being within the influence of the River Colville.

On the 10th, we were off the entrance of this river; and the wind which had increased to the force of a gale, with rain and snow, was then anything but acceptable, as we could see but little distance before us. We were constantly coming in contact with grounded pieces of ice; the only evidence of their proximity being the noise of water dashing against them. Although the area of open water had then increased, yet we knew not the moment that our progress might not be arrested by some hidden shoals in this unknown sea. The temperature was barely above freezing point, usually ranging from 34° to 37° , and everything wore an aspect tempestuous and dreary as we still, surrounded by difficulties, continued on our way.

Early on Sunday morning, the 11th, an island was observed E. by S. of our position, which proved to be one of Jones' islands; and, as we approached, something resembling a cairn, with a pole in its centre, was discernible. At 4 A.M., Mr. Court and myself were dispatched, when about three miles distant, to examine it; and the morning being boisterous, cold and foggy, we had a long and cheerless pull to its shores. On reaching it, we found the island to be about five hundred yards long, and about half that in breadth.

entirely composed of sand and shingle, with great quantities of driftwood strewn on its surface, which, together with the combined action of the ice and currents had doubtless led to its formation. What appeared to be a cairn when viewed from the ship, was nothing more than a small pile of driftwood, with a spar, about twelve feet long, placed vertically in its centre, which left no doubt in our minds of its being the work of human hands. As we approached in the boat, I fancied that I saw two figures in motion; but distance and the fog then present did not enable me to speak with certainty; nor could I discern any footmarks on the sand in support of this opinion. On examining a large piece of ice, some twelve or fourteen feet high, which, from the effects of pressure, had been forced on the beach, its surface having the appearance of being trodden on, with sand strewn on it, left no doubt on my mind of there being Esquimaux in the vicinity.

After thoroughly exploring the island without any satisfactory result, we erected a mound of earth, and having deposited a bottle containing a record of our visit, we took our departure and returned to the ship. We saw numerous flocks of ducks at a distance, and the several pools of water in the island were the resort of the Little Sanderling (*Calidris Arenaria*)—we shot several specimens. Soon after coming on board, several Esquimaux were seen approaching the island in baidars, who in all probability had been watching

our movements concealed behind some of the heavy grounded ice in its vicinity—confirming the opinion I had entertained of their presence. They were soon observed in swift pursuit; but as we were then standing out towards the pack, we were in loose-sailing ice before they reached us. They were at once subject to the usual interrogatories with respect to the appearance of white men off the coast, but nothing satisfactory was elicited. They appeared a better class of people than those met off Point Drew. They said that on hearing shots fired in the direction of the island, they immediately left their encampment on the main land, and proceeded to it, where they saw our footmarks, and the ship in the offing. These people supposed we had come for trading purposes, and appeared to doubt our veracity when informed that we were then in search of lost brothers, whom they were desired to assist should they appear on the coast.

Love of barter, and an avaricious spirit alone prevailed amongst them, and they had evidently come off prepared for opening an extensive trade, from the amount of property in skins they had in their boats, the best of which they concealed that the worst might be first disposed of. We procured from them a good quantity of fish, wild ducks, a few furs, bows and arrows; the former were at once issued to the crew, and proved a welcome addition to their daily fare. Tobacco is an article much coveted amongst them, a

piece about two inches in length, was considered equivalent for a fish, but observing some of us cut a stick into two pieces, the wily Esquimaux immediately cut his fish into two portions, and offered them for barter on the same terms. A dense fog coming on, they were afraid of losing their way, and speedily betook themselves to the shore, from which they seldom venture to any great distance.

For the remainder of the day, we continued working our way under the same adverse circumstances as before. Towards evening, the fog having partially cleared off, a low flat island was observed to the E.S.E. and as we approached, a number of Esquimaux could be seen running to and fro in evident consternation and amazement. We stood in as close as we could, intending to communicate, in the hope of obtaining a supply of reindeer; the number of people justifying the belief that their encampment might be on the island. It was considered judicious that every precaution should be taken to guard against treachery or surprise; a cutter and whale boat were accordingly manned and armed, in which Captain M^cClure, Lieutenant Creswell and myself, accompanied by the interpreter, proceeded to meet them. As we approached, they made the usual signal of peace, which we duly returned; when we leaped on the beach, they came down to receive us, and we had to go through the customary operation of rubbing noses. They manifested a friendly disposition, and informed us

that their encampment was on the main land, so that we were disappointed in our hopes of procuring a supply of venison. They were evidently in conduct and appearance the best tribe of Esquimaux we had yet seen; they were also cleaner and better dressed. Their chief, Attawa, was a fine specimen of his race, above the average stature and generally intelligent. To him we entrusted a letter in a canvas bag, to be forwarded to one of the Russian Fur trading posts, but were obliged to tell him its contents, before he took charge of it—by way of reward for this we presented him with a white ensign hoisted on a boarding pike, which had excited so much of the wonder and admiration of his people, and made several presents to others. We had before remarked how seldom it was that we saw any articles of European manufacture in the hands of the several tribes we had met with, and were, therefore, rather surprised to see a gun with one of them, which was carefully wrapped up in skins. On examining it, the words 'Barnett London, 1540,' was engraved on the lock, and we were informed they had received it in trading with other tribes to the southward. Our conference had been carried on close to a large fire of driftwood they had kindled on the beach, to which they had invited us on our landing. When we left it, they escorted us to the boats, where the friendly nasal salutation again took place; they at the same time promising to visit the ship on the following day, with a supply of

venison. These people, like all others we had seen, were most astonished at the appearance of the ship, and entertained the same idea of her being a great living island. They watched us for some time, then took their departure for their encampment; the chief in the midst carrying the flag, with evident pride of being the bearer of so valuable a present.

Our progress during the night being inconsiderable, the island was still in sight on the morning of the 12th, when four baidars came alongside, filled with men and women. They came on board, and barter at once commenced, but instead of the supply of venison they had promised us, all we could procure from them were a few ducks, some fish, and skins of an inferior quality—all those of value I observed were kept in a mysterious looking leather bag, in strict charge of one of their party in the stern of the boat. The majority were strangers. That they are a thieving, cunning race there can be little doubt, and they would be equally treacherous and deceitful, were their cupidity excited by anything in the hands of a weaker party, notwithstanding the friendly demonstrations they might evince. Although several were yesterday the recipients of our bounty, two of them made most adroit attempts at theft, by taking articles of no less magnitude than the pump-winch and an ice-anchor. Our observation was attracted to this, by seeing a fellow stealthily leaving the ship with one of the winches partially concealed.

His boat was immediately examined, and the other was found concealed from view by a woman sitting on it. The thief was evidently an accomplished one, for we were all closely watching their conduct, and the sentry at the gangway had special orders to that effect; but their cunning and dexterity had quite baffled us. The fellow who attempted to possess himself of the ice-anchor, was caught in the act, it being rather unwieldy (about fifty-six pounds weight) to move readily, but he was not dismayed when detected. He was sent into his boat, and not again allowed on board. They took their departure for the shore, after continued attempts at thieving obliged us to send them out of the ship.

Considering it a desirable thing that some permanent record of our communication with the various tribes we had visited should be placed in their hands, as proof of our having gone along the coast, for our Consort or any other ship that might follow us, I suggested, on first meeting them, that the ship's name should be stamped on all articles we gave them, as far as our resources could effect it. I accordingly wrote it in large letters on the knives, with some corrosive agents in my possession; and the interpreter was instructed to inform them, that their success in the chase would much depend on its preservation. The carpenter (Mr. Ford) had also very ingeniously made some copper medals, similarly

marked, for distribution, and had likewise with a diamond written it on all the small looking-glasses—the latter being much prized, and an object of very great astonishment.

Our progress to the eastward being much retarded by baffling winds and currents, we seldom averaged more than twenty or thirty miles a day. It may, therefore, be easily supposed how ardently we hoped for a leading wind; and, as it fell calm towards evening, fancied it might prove the harbinger of a change. The boats were lowered to tow, but were soon recalled, as we found the ice setting towards the shore, and through this we continued our slow advance. We sighted another small island in the course of the evening; and with the aid of our glasses saw a numerous herd of reindeer, and several birds, which, from their size and appearance, I considered to be the North American Crane (*Grus Canadensis*), the first of either we had seen.

Since we advanced beyond the influence of the Colville River, the sea-water had again become more saline, and risen in density to 1017. The temperature of air generally varying from freezing point to 40°—young ice forming nightly on the pools of water.

CHAPTER V.

Difficulties in working to the North-East—Ship secured to Floe—
 Ice—Archery—Cast off from Floe—Progress and Incidents—
 An Island discovered—Point Anxiety—Critical Position—Our
 Difficulties—Ship on Shore—Means adopted in consequence—
 Results—Again under Sail and Incidents—Boat capsizes—
 Loss of 304 lbs. of Meat—Weather—An Ice Scene—The
 Pack—Our Position and State of the Ice—The resolution
 adopted—Fail in effecting our escape—A Thunder Storm—
 Rain and Results—Endeavour to regain the Mainland—
 Towing—Incidents—The Ice—Its Difficulties—Operations—
 Success attending them—Ship secured to Ice—Appearance—
 An Ice Scene—The New Island—Its Features and Character
 —Incidents and Observations—A Bear Track—Whales'
 Skulls—Ship, her Appearance—Weather—Cast off from Floe
 —The Ice—Its Aspect, &c.—Reflections—Incidents—
 Progress, brighter Prospects and better Results—Hopes of
 reaching Banks' Land—Reflections—Appearance of Ice—
 Open Water—Course to the Northward arrested—Soundings
 —Position—The Pack—Alter Course—Weather—Make the
 Land—Towing—Results of running into Pack—Solitude of
 our position—Stand in for the Land—Tidal Line—The Water
 —Alluvial Deposition and Results—Islands—Weather and
 Difficulties of Navigation—'Flower's' Boats—Mackenzie
 River—Remarks.

Our position on the morning of the 13th was by no means improved. Our hopes of a fair wind had not been realized; we were surrounded by heavy floe-ice, and through its intervening narrow channels were incessantly tacking in vain endeavours to work to the north-east. As we could make no headway, and the weather towards noon becoming thick and hazy, it was resolved to link our fate to a large piece of floe-ice, towards which the ship was warped and secured for the remainder of the day. Our first object was to obtain a supply of fresh water from one of the numerous pools on its surface. In one of them a small fish was procured, the water being perfectly fresh, and the pool only a few inches in depth, on the surface of a floe which averaged, at least, thirty feet in thickness. It was probably entangled while the ice was in formation.

We were all extremely glad to take advantage of the exercise which this icy field afforded us, after being so long confined on board, rough and uneven as was its surface, for there was scarcely a square yard of level space. We amused ourselves at archery with the bows and arrows procured from the Esquimaux. This was practised with a degree of zest equal to its novelty, for, I believe, there was not an arrow left in the ship in the course of a few hours. The evening closed in gloomy, dense and foggy. The ice to which we were attached having drifted very slowly to the N.W., we cast off from it on the following

morning, and made sail to N.N.W.—the only direction in which we could go—the wind still obstinately blowing from the N.E., with heavy, formidable looking congealed masses everywhere around. Towards noon a shoal was observed, S. 31° E., it had the form of a low sand bank, and was doubtless in process of becoming an island, in a manner similar to others I have mentioned, and from the action of the same causes. We still stood on, tacking frequently to avoid the frozen barriers that stood in our way, with which we frequently came into collision, and there could exist but little doubt that we were again in the meshes of the pack, which had been gradually setting towards the shore.

The depth of water varied from four to seven fathoms, and shoals were evidently numerous, as much of the ice was aground; our area of water was becoming more circumscribed, and the report from the crow's-nest told, that the heavy pack surrounded us on all sides. A low flat island was discovered not far from our position, but almost concealed from view, by an outwork of grounded ice on its shores; we then floated in a sort of basin, being the only water anywhere discernible, and from appearances we were soon likely to be furnished with the unpleasant experience of navigating an unknown and ice-bound sea. Our position at this time, was off Yarlborough Inlet, between Point Anxiety and Return Reef—a memorable part of the coast, where the gallant Franklin

had some five and thirty years previous, cast his longing eyes to the westward, in vain expectation of succour, and from whence he commenced his return, baffled in the hopes he entertained of reaching Behring's Strait. That it was a Point Anxiety to us likewise, we soon became aware, to the increase of our perplexity. The water having been gradually shoaling, we found ourselves in three and a half fathoms, with not a shadow of hope of the pack moving off on either side for the present; our only chance of escaping the danger which threatened us, lay in our being able to round the northern extreme of the island I have mentioned, and anchor under its lee, until the ice afforded us an opportunity of getting again between it and the shore, and clear of the dangerous position in which we were then placed. With a view of ascertaining our ability to accomplish this, the second Master was dispatched to sound, and I accompanied him in the whale boat; we found water sufficient for the passage of the ship, and returned on board with this pleasing intelligence. The ship had been hove to for our return, sail was made and we proceeded towards the main pack as far as we could, so as to make a good stretch across for the island on the next tack—a boat at the same time sounding ahead of the ship—when from some cause or other, having deviated a little from the course indicated for us to follow, suddenly the ship struck on a sand-bank and grounded in two and a

half fathoms. It being considered we had got on the top of a bank from the soundings obtained ahead, an effort was made to run her over it, with all plain sail set; the boats were lowered to lighten her, and an anchor was laid out ahead and hove on from the capstern with all our available strength, but in vain. Persisting in this course, would only have increased the labour and difficulty of getting her off, as we found it impossible to move her over the bank, and were only fixing her more firmly in her position. An opposite course was, therefore, adopted. We at once shortened sail, anchors were laid out astern, and hove on, but with no good result; it was, therefore, difficult to say what we might not be compelled to do, or how prolonged would be the labour and exertion necessary for again floating her; and as we had been for five hours incessantly at work, it became necessary to refresh the men for the night's labour now before us. A ration of bread, meat, and spirits was issued, and it being then ten o'clock, fifteen minutes were allowed for eating it, when all hands were piped on deck—with cheerfulness and alacrity the call was responded to, officers and men were again actively at work, and no hand in the ship was idle.

All the provisions on deck, consisting of thirty-five casks of three hundred weight each, were hoisted into the boats, the heavy anchors were also taken out, which tended to lighten her a little. While thus engaged,

the ice which had been for some time setting down towards us in huge detached pieces, came in contact with our cables, and then fairly on our broadside, requiring the most strenuous efforts to keep them clear of the boats with the provisions, which might have been readily crushed between them and the ship. What was most to be feared, happily did not occur—the main body of ice setting down—as we knew that a slight impulse would determine it towards us, and the result under the circumstances would have been our total destruction. Orders were now given to have all in readiness for pumping out the water, about twenty tons of which we had in the tanks; but previously, the capstan was again manned by all hands, and the powerful effort which was then made, brought a cheering report from the leadsmen astern, that she had taken two inches of the line, and had consequently moved.

This was sufficient encouragement to renew our efforts, and after their frequent repetition, we had the satisfaction of seeing success attend them, and our good old ship once more afloat and lively as before. Our labour was not then ended, the provisions, anchors, &c., had to be hoisted in and re-stowed; but having experienced the effects of a strong south-westerly current, it became necessary to set sail, to render the ship manageable, and better able to resist its effects which might again bring us into the same difficulty. While doing so, the boats heavily laden

were towed alongside, when the third whale boat was unfortunately capsized, and its contents, eleven casks of prime beef, deposited on a sandy bed in five fathoms water. We had thus lost no less than 3344 lbs. of excellent meat, which might have been obviated had the suggestion of one of the Officers been adopted, of towing this boat with the others to leeward rather than to windward of the ship, but from some cause not in my power to explain, this was not acted on, and bitterly did we deplore on many a subsequent day of hunger and want, the loss we then sustained. It was not until 4 A.M., that everything was safely on board, (*except our beef*) and we sought that rest for which our late exertions had well prepared us to enjoy.

The morning of the 15th of April was ushered in with delightful weather, contrasting forcibly with that of the few previous days—its balmy warmth and mildness being but rarely met with in these regions even in the height of its summer. The sun shone forth brilliantly, diffusing an amount of warmth which rendered our clothing almost too much for us; but whenever a passing cloud obscured his brightness, even for a moment, the icy chill was felt. There was scarcely a breath of air to curl the surface of the water, on which we sluggishly lay, surrounded on all sides by that terrific-looking pack, whose prisoner we then were. The formidable appearance presented by the ice was much heightened by the

wonderfully refractive power of the atmosphere, which, added to the extreme fineness of the day, produced an aspect of grandeur and peculiar beauty, that, even in our then forlorn position, one could not but view with feelings of intense admiration. The large floe pieces detached from the main body, presented a beautiful appearance from the spotless whiteness of their picturesque and singular surface. Such huge masses piled on each other could only have been effected by the most colossal force. On the more distant pack, refraction had exercised all its distorting power, making it appear a lofty, impenetrable wall of crystal, and, its outline, required but little effort of the imagination to trace out the forms of churches with towering spires, castellated mansions and edifices of various kinds, reflecting from their icy sides tints of iridescent hue: all produced by the larger pieces of packed ice, thrown together by a power that sets all human efforts at defiance.

We had not moved more than a few yards from our position of the previous evening, unless slightly to and fro by the partial currents which existed. Indeed, it would have been highly dangerous to have done so, from the shallowness of the water—only three fathoms and three quarters; or we might have had a repetition of our disaster. We were still close to the island we had discovered, when about 10 A.M., the Second Master, Mr. Court, in the third whale-boat, was despatched to sound, and endeavour to seek for

a passage that might lead us out of our unpleasant position. On his return about noon, his report was not cheering; and to run the risk of moving without some definite plan to act on, surrounded by shoals as we then were, with the chance of the ice setting down on us, would have been highly injudicious. One of two courses only remained for adoption, neither of which promised any cheering results. First, either to attempt to retrace our steps through the heavy loose ice we had so much difficulty in passing the previous day, but which might now be impenetrable, with the probability there existed of a change of wind setting the ice off shore, and immovably fixing us in its grasp; or, secondly, to anchor even in the shallow water we were in, being in sight of the mainland, as the lofty range of the Franklin Mountains were discernible, and await whatever change might occur in the elements, to drive the ice off shore, and enable us to get between it and the land once more, which certainly appeared the most advisable course for adoption. About 1 P.M., the Captain and the Second Master proceeded in the third whale-boat, with a view of seeking a passage, through which our escape might be effected, but returned in the course of a couple of hours with no better intelligence—when it was finally determined to anchor where we then were; and the best bower anchor was let go in three fathoms and three quarters, thus to await whatever fate might befall us.

The progressive fall in the barometer for three successive days, led us ardently to hope for a change of wind with the anticipated change in the weather, which we then anxiously awaited. Towards evening, the clouds hung heavily on the windward horizon, the sky became overcast and lowering, and had assumed a highly electric appearance; and the air was close and oppressive. This state had scarcely been established, when vivid flashes of sheet lightning shot forth, preceded occasionally by thunder, neither loud nor prolonged; rain fell heavily; and the vane at the mast-head told us that the wind had shifted into the south-west quarter. The lightning appeared to but little advantage from the presence of the sun; otherwise it would have been so much more effective in heightening the wildness of the scene. I could not but think that lightning with darkness in these regions would have presented an appearance of rare grandeur. With this change of wind, the temperature of air rose from 34° to 45° ; and the water, from my last examination off Jones' Islands, had, in this short space, increased in density to 1025.

On the morning of the 16th we were still at anchor, the contiguity of the ice preventing us from taking advantage of the fair wind which had favoured us but for a short time, when it gradually died away. It had, however, set the inshore ice in motion, and materially altered its aspect—the loose ice

having fairly set down on us, opening to view narrow channels of water, where, a few hours previous, there was nothing to be seen but heavy impenetrable packed ice. We at once determined to take advantage of the change, and endeavour to regain the shore if possible. The anchor was weighed, and the boats called away to tow—a work of no light nature under the circumstances—and by their aid we continued to creep along until about 1 p.m., when the ice became so close and heavy, and the channels of open water so narrow, that the continuance of the towing became impracticable. The boats were, therefore, called alongside, and after the men had partaken of dinner, and been further refreshed with an extra allowance of spirits, the struggle was again renewed. The pieces of ice then around us were so large and ponderous, that many of them had grounded; between which and generally detached throughout this loose section of the pack, were smaller pieces floating, and almost entirely obstructing the narrow channel of water, that rendered other operations necessary for our advance. We, therefore, commenced forcing a passage by boring and warping the ship through them. Ice anchors, poles and hooks were had recourse to; the former laid out and well secured in the ice, were hove on from the capstan, the poles and hooks, at the same time, were in requisition to remove the smaller floating pieces that retarded our snail-like progress, while the Ice master, from the

crow's-nest, directed us into those channels or leads of water which appeared to present the greatest facilities for getting clear of our very awkward position. Thus we advanced through narrow, zig-zag channels, none of which were sufficiently large to admit a boat even without ours; and through narrow passes where the ship was forcibly thrust by the united power of us all. We, at length, got within thirty or forty yards of water much clearer than any other space that could be observed around, but with little hope of our being able to reach it, from the heavy and closely packed character of the ice, which was still setting down and curtailing yet further its already very limited area. Our difficulties then, indeed, appeared to augment as we gazed on the insuperable obstacles that lay in our path; but we went boldly and resolutely to work to grapple with them, and by a patient and persevering use of the means I have spoken of, and the zealous, energetic efforts of all, we had, at length, the satisfaction of seeing our exertions attended with the success we had hoped for, but could scarcely have expected, after seven hours incessant toil.

We had reached a small space of open water, through which the ship was then warped, by laying out ice-anchors, until we had got as far as it then seemed judicious to advance, and made fast to a huge mass of snow-white ice, grounded in four fathoms water, yet from fourteen to fifteen feet

high from the water's edge—the effect of pressure having thus forced it much above its line of flotation. It had a surface of about half an acre in extent, with a remarkably fine imposing outline; and here we rested after our recent conflict, being then unable to make further advance.

The evening was mild, clear, and serene, with not a breath of air, and the lovely yet frigid scene around us appeared to wonderful advantage; for an ice-bound sea presents, at times, features of peculiar and picturesque beauty, such as can only be seen in the cheerless regions of the Polar Ocean. There was a deathlike stillness and solitude, but associated with sublimity and grandeur reigning everywhere around, as I walked out on the ice and gazed in admiration on the icy scene before me. But there we were surrounded on all sides by regions of frozen water, shut out apparently from that arm of the sea that we yearned so much to reach, without any visible hope of escape, unless the aspect of affairs should wonderfully alter. The numerous inequalities of surface and irregularities of the pack added variety to its beauty; many ice islets floated about, and one, not of a different character, lay in our immediate vicinity. They were beautifully reflected in water of a mirror-like smoothness, apparently forming the margin of a great æthereal basin, for the canopy of heaven, with its rich blue sky, lofty and well-defined *Cirri*, found there an equally truthful and picturesque

reflection, and appeared as if contained within it. But what a peculiar feature the presence of our ship imparted to this scene as she then lay secured to a gigantic mass of that element, which had lately so often endangered her safety. She appeared as if a captive in its icy grasp, as no trace of our entrance into this isolated pond, nor any path whereby to effect our exit, was anywhere to be seen. So rapidly was the ice setting down on us, that we determined to remain in our present position, without attempting any further effort to advance; indeed this would have been utterly futile, until the morning, when we hoped for a fair wind and more open sea to facilitate our onward progress—the delay likewise affording us that rest, so much required, after a day of most laborious exertion.

Our contiguity to the island which had not been far distant at any time for the two previous days, induced some of us to forego sleep and explore it. From the great number of seals we had seen, we concluded that fish was plentiful; and, with a view of procuring some, we resolved to haul the seine. The third whale-boat, with a crew of volunteers from the ship's company was soon manned, the fishing gear in readiness, and a party of us proceeded to the shore. On landing, we kindled a huge fire of drift-wood; some commenced preparations for fishing, while others proceeded to explore the island, and took our guns in expectation of meeting with some of the

numerous flocks of ducks that had been observed. I found this island, like others I had visited, entirely composed of sand, shingle, and driftwood; its greatest elevation was not more than six or eight feet above water, its outline irregular, about three or four miles in circumference; in the centre was a lagoon of shallow water, and the beach was sloping, with the greatest elevation near the water, from the pressure of the ice forcing up the sand. The water was most shallow on that side nearest the coast of America, with which it will, in the course of time, doubtless, become continuous. It was quite devoid of verdure—a few tufts of saxifrage and stunted grass, the only trace of vegetation. The pebbles were chiefly of granitic character, with porphyry, clay-slate, mica-schist, ironstone, &c., all smooth, and much water-worn. We found two crania of whales, one lying on the surface, and the other partly imbedded in the soil; saw traces of foxes, and came on the recent track of a bear, where he had been feasting on the body of a seal but a very short time before. These we followed up in the hope of meeting with Bruin, as they were the first traces we had met with; but he had betaken himself to the ice. We came on a well-trodden bear path, which led us to suppose this island was a frequent resort of these hoary denizens of the north, with some of whom we longed to have an encounter. As it was approaching midnight, we retraced our steps towards the boat—the blaze of the huge fire burning brightly in the distance

affording us a good guide across the sandy waste, on which the foot of man had never before trodden. The fishermen had no success; and we had only shot a few Ducks, the Eider and Long-tail.

We soon embarked, and proceeded to the ship, distant about half a mile, and found a film of ice on the sea, which was the first appearance of salt water freezing we had seen, and evidenced an advancing season; its density was then 1011. The air had become cold, dense, and humid; and it was surprising the distance the voice could be heard, through an atmosphere that had become wonderfully refractive, distorting, in a surprising degree, every object in our view.

At 1 A.M. on the 17th, the ship was cast off from the floe, and we again commenced our advance by warping as before; but in the course of a couple of hours, having only made a few yards, the weather had become so foggy and the ice so close, that it was impossible to proceed, and we again made fast to a floe to await a more propitious state of things. Large quantities of ice having set down during the night to the north-west, we expected to find that which was the day before quite impenetrable, now loose sailing ice—but as yet in vain.

So fettered does the aspect of affairs become in a short time from slight causes in ice navigation at this season of the year, that the delay of a few moments may cause a ship to be immoveably fixed in drifting

fragments or a section of the pack without any means of escape ; or, on the other hand, a change in the wind or in the direction of the current, may in an equally short space of time cause such an alteration in the character and disposition of the pack, that instead of an appearance terrific and formidable, loose streams of ice become detached, and narrow channels of water formed—so varied and ever varying is its aspect. Thus fond hopes are indulged in, only to be blighted, and the bitterness of disappointment keenly felt, that the germ of reviving hope may be more gladly nurtured and made welcome when it comes. Feelings of anxiety, hope, joy, disappointment and terror, often follow each other in rapid succession, and thus keep the mind in a state of constant excitement. Ice navigation is, therefore, the school for testing the powers of patience and endurance, and calling into activity all the perseverance, energy, judgment and daring that men are possessed of.

As there was every probability of the ship being momentarily placed in such a position, that the rudder might become damaged or rendered useless by the pressure of the ice ; the crew were practised in unshipping it, so that on any sudden emergency, they might accomplish this with dexterity.

About 2 P.M. we were again under weigh, and made sail with a light variable wind from E.N.E.—the ice having become sufficiently open to admit of our making a few short tacks to clear the island. In the

course of an hour, the wind to our great joy veered round to the north-west, enabling us to pursue a course to E.N.E., the water at the same time increased in depth to six fathoms, and the change we had so anxiously looked for had at length taken place. The pleasure which we all derived from having the ship under canvass as a propelling power the first time for the previous three days, became enhanced, as she made good way through a loose puck with a favourable wind, in water as smooth as a pond. Thus a formidable barrier that existed but a few hours before, and one which no earthly power could overcome, was now happily removed by that Divine power who wills the course and might of all elemental forces, and cheerily did we then wend our way through heavy packed ice, heartily grateful for that interposition which had enabled us to do so.

We continued our progress for the remainder of the day, the impediments still diminishing; the ship occasionally sustaining some heavy shocks as the ice came across our path, causing all the bells to ring. This was then a source of amusement, elated as we were at our happy deliverance, particularly on casting a glance astern, and beholding the position we had occupied—an uninterrupted field of heavy packed ice, in which we would have inevitably been beset.

Several small islands were passed in process of

formation; some a few feet above water, and others just appearing above the surface; shoals evidently abounding on all sides. Evening closed in with a change of wind to a still more favourable quarter, south-west, which had the effect of setting the ice off shore, and consequently of increasing the area of open water, and of further favouring our progress to the eastward.

On Sunday the 1st, the weather had become foggy with occasional rain and sleet, the usual concomitants of a south-westerly wind; several small islands were seen, and about 10 A.M. we passed that bearing the name of 'Flaxman,' discovered by the brave Franklin in his early exploration of the coast of America. Towards noon, the low coast of the main land was to our great satisfaction again visible, with a lofty range of snow-capped mountains in the distance; the sea was everywhere clearer of ice, the wind was steadily freshening, and there was every reason to hope that we were on the confines of that expanse of water which that accomplished and distinguished Arctic traveller, Sir John Richardson mentions, as extending off the coast in the vicinity of the Mackenzie river every summer. High were our hopes, and ardent our expectations at the favourable circumstances that now enabled us to shape a course for Banks' Land; and as its western limits were unknown, none could say how soon it might be reached, the ship going seven and a half

knots. The pleasure we then experienced compensated us for all our previous anxiety.

There was, at the time the course was altered for it, a gentle heaving of the ship—a sure indication of a large expanse of open water before us, and it had gradually deepened to sixty fathoms.

The masses of floating ice we had passed during the day, appeared to have assumed more of an architectural character, so accurately as almost to afford evidence of design—tunnels, columns, façades, pediments, and temples, which in the accuracy of their proportions would have reflected no discredit on a rising architect. Grottoes too there were, so beautiful, as if nature had exhausted her best skill in their formation.

The morning of the 19th wore a wild and gloomy aspect, for the wind had freshened to a gale, and changed more to the westward; snow fell uninterruptedly, and more than all, we had again encountered the pack, then ninety miles from land, with immense floes intervening, and could obtain no soundings in 195 fathoms. We still, however, pressed on wherever the slightest opening appeared, and were gradually getting farther into the meshes of the main pack, until at length our progress was arrested, and a further advance became quite impracticable. The ship had already sustained some heavy shocks, and brought up, with all sail set frequently, in our endeavours to penetrate and force a passage through

the loose stream ice that lay in our way. It was, therefore, quite impossible to pursue our course, and we stood along the pack edge ready to take advantage of any circumstance likely to favour our northerly advance. But our position had become very perilous, owing to the certainty of being beset, on the least change of wind to the southward, for all the heavy floes, which had streamed off from the main body of ice, were in motion and would speedily have closed the narrow channels of water in which we moved, and fixed us in an everlasting grasp, should a worse fate not instantly have befallen us.

It was quite evident we had run on our northerly course into one of those deep indentations of the pack so frequently met with, and had penetrated as far as it was possible; as the ice master could not observe from his aerial position, a trace of water throughout the wide extent of the dreary wilderness which lay exposed to his view. Our attempt, therefore, to reach Banks' Land in this direction having failed, the only course left for us to pursue was to follow the pack edge towards the mainland, where our chances of effecting more might probably be greater, could we reach the known longitude of its northern outline; besides which, we were escaping from a critical position, where in a moment our efforts might have been irretrievably paralyzed. We therefore kept away to the south-east; and later in the day had to pursue a southerly course, to keep clear of those

formidable barriers which opposed our progress, but with whose colossal power and might we dared not attempt to cope, having so often tried it in vain. The deep sea lead was sent down in ninety fathoms, but obtained no soundings; the temperature was found to be 29.5 ; but towards midnight, having been rapidly approaching the coast, we got soundings in twenty fathoms—mud, and we were getting once more into a more open sea: our anxiety to reach which was great, as the vast floes we escaped from were all closing on the parent pack, and we could not but feel deeply grateful for that Providential goodness which had again safely delivered us from our perilous position of the morning. This ice was unanimously pronounced the most stupendous we had yet seen—from its heavy, terrific appearance, it must have been the growth of ages; and, was doubtless, that pack which extends uninterruptedly from shore to shore of the Polar Sea, except where the presence of land may intervene.

Night closed in with the same wild, tempestuous aspect as the morning—cold, raw and foggy. The temperature of sea-water had fallen to 29° , and that of air ranged from 33° to 34° ; the decreasing density of the water 1010, told us of our coming within the influence of the Mackenzie River. As there was then some hours of partial darkness, the absence of the sun rendered everything more cheerless.

Early on the morning of the 20th, after having sailed through seventy miles of heavy floe-ice, a low point of land was observed to the southward, with the range of Buckland Mountains in the distant background, but it was soon lost to view from the dense haze formed over it. Towards noon there being an appearance of open water to the northward, we again stood towards it, unwilling to relinquish our cherished hope of reaching Banks' Land, and still anxious that no opportunity should possibly escape us of forcing a passage through the ice, if this was in the power of human efforts to effect. We had not proceeded far, however, when the same impenetrable front presented itself, and sailing through loose ice, against which we struck heavily from time to time, we again found ourselves surrounded on all sides. The wind having fallen light, as it generally did, when we were advanced in the pack, our progress became quite arrested, and we were drifted in a current found setting to S.E. A calm subsequently intervening, the boats were lowered to tow, and continued doing so for four hours, counteracting in some degree the power of the current. They led us round a projecting point of ice, where the water appeared more open, we having been obliged to do this with the ship's head to the south-west—diametrically opposed to our course. It would have been injudicious to exhaust the strength of the men in towing us further in a retrograde course, and we had reached a position

where we might for a time anchor, at considerable risk it is true, and hope for a breeze before morning, which would do more for us in an hour or two, than the prolonged efforts of the crew throughout the night. The boats were accordingly called alongside, and a kedge anchor let go in seventeen and a half fathoms—mud. We were still on the edge of the pack, and in the midst of ice. Every precaution was consequently taken, in the event of our being beset, or of our position becoming more critical during the night, that the proper means to obviate either might be at once had recourse to.

Thus again had we completely failed in attempting to penetrate the pack, and shape a course for Banks' Land, which, after repeated, toilsome, and hazardous trials, we found an utter impossibility from that part of the Polar Sea. No earthly means of any magnitude or power, aided by all the best appliances of art, and guided by the judgment, ingenuity, and best energies of man, could avail in the slightest degree, in surmounting the overwhelming obstacles which, on these occasions, opposed our progress. It was to be regretted that we had again lost our fair wind, which we calculated would ere this have taken us to the eastward of the Mackenzie, as well as much valuable time, by running into the pack, and making another fruitless attempt to proceed to the northward, after the experience we recently had ; but our motive in doing so was a laudable one, and we consoled our-

selves with the reflection that we had left nothing undone. Although we did not obtain success, we fancied that we deserved it.

For the few preceding days, we had been quite forsaken by all the feathery tribe, whose frequent appearance in flocks was gladly hailed, enlivening as they did, the cheerless aspect around. Not a seal even was visible, nor a trace of animated nature anywhere to be seen. Nothing was to be heard but the sound of the rippling current against the neighbouring floes, which, together with the measured stroke of the oars in the boats towing, as it fell faintly on the ear, alone broke the dreary, solitary stillness which everywhere prevailed. Snow falling heavily contributed much to the gloomy and cheerless aspect of the evening.

At 5 A.M., on the morning of the 21st, a light breeze sprung up from the N.E., when we weighed anchor, made sail, and stood away to the southward, that we might get clear of the heavy, loose ice which surrounded us; and pursuing this course for a few hours, we got into water comparatively free; and land was again seen from the mast-head, which subsequently proved to be Garry Island. About 10 A.M., we passed through a distinct line of tide, running N.E. and S.W. The water, at the same time, on the inshore boundary of the line, rose in temperature from 31° to 39°, that of air rose suddenly from 30° to 38°. The former became discoloured and

brackish, and sank in density from 1018 to 1012 ; and there could exist no doubt that we had at length arrived within the influence of the Mackenzie River : this, our position, ascertained at noon, fully confirmed.

As we approached the land, we found the water shoaled rapidly, until we got into four fathoms, when we were obliged to work the ship from shoal water to the ice, tacking incessantly in from seven to four fathoms. This shallowness was doubtless owing to the proximity of the islands, as we were then forty miles from the shore of the mainland ; but recent experience of shoals elsewhere fully justified our not attempting to approach nearer than in four fathoms. The appearance of the water, loaded with mud, causes the abundant deposition of alluvial matter in the neighbourhood of those islands laid down in the chart, and favours the opinion that they are still increasing in extent, or that new ones are springing into existence. Indeed, this part of the coast appears to be still in process of formation from the vast amount of alluvium brought down by the larger rivers, Mackenzie and Colville, together with numerous smaller ones ; and the streams and rivulets that course through the country in the season of thaw, and empty themselves into the Polar Sea, all surcharged with the material which is to add still further to the extent of this great continent. The quantity of driftwood strewn along the coast is enormous, particularly in the bays—forming a ready nucleus for the deposition of alluvium

held in suspension; and the barrier presented by the ice to seaward, and that grounded along shore, facilitates the deposition in a remarkable degree; so that considerable accessions of land must, in the course of time, be made to this part of the American coast, from the gradual encroachments it is making on the limits of the Polar Sea.

In the course of the day the Pelly Islands were seen; but of these as well as Garry I am unable to give any description, on account of the distance and the dense haze generally present. They were more elevated than any we had yet seen. These, with the several other islands at the mouth of this great river were the earlier discoveries of Franklin and Richardson; nearly all were visited, and of one (Richard Island) the former narrates a most affecting incident.

Heavy fog with increasing wind set in towards evening, and the surface of the water was more agitated than we had for some time seen it, caused in a great measure from the antagonizing influence of winds and currents. The difficulties of navigating the ship were extreme, at no period of the voyage were they greater, and we were surrounded by islands, shoals and ice. The lead line was our pilot on one side, and the ice on the other, but as the latter could not be observed on account of fog and increasing darkness, evidence of its presence was conveyed in the heavy shocks which the ship from time to time sustained.

Thus we continued our way, under circumstances, which led us to expect disaster every moment; nor did the following morning, the 22nd, reveal to us a more favourable state of things.

The weather still remained of the same foggy character, and the wind still obdurately came from the north-east, which obliged us to tack incessantly as before. In the course of the day, Kendal, Richard, and the Whale islands were observed to the north east, and we subsequently learned that about the same time the boat party of the 'Plover,' which had proceeded along the coast to the eastward, was then cruising amongst these islands on their return to the Mackenzie River, and strange to say we failed in seeing each other. Could our advance so far to the eastward have been anticipated, it would have been an important matter to have preconcerted a plan for meeting with this party at an appointed rendezvous, or at least to have left a record of our proceedings for mutual guidance. Combined operations on such a service cannot but be considered essentially necessary to ultimate success.

Towards evening, the fog gradually dispersed, the weather became generally clear and serene, and maintained the same character throughout the subsequent day. We still continued within the influence of the Mackenzie River, advancing under the same circumstances as before, in a sea of water; fully con-

firmatory of the recorded observations made by Sir John Richardson in his early explorations of this part of the coast, and more recently in his able and interesting account of a boat voyage from this river to the Coppermine.*

“ Richardson's Boat Voyage through Rupert's Land.”

CHAPTER VI.

Weather, &c.—Point Warren—Esquimaux—Their Encampment—Appearance of a European—Landing on the Beach—A Grave—Hostile reception by the Natives—Incidents—Peace established—The Women—Sick Man and Incidents—Appearance of the Men—Their Hut—Consternation produced by the Ship—Results—Flight of the Tribe—Intercourse with the Indians—Fire Water—Discovery of a Button and Results—Reported Murder of a European and a Party on the Coast—Boats seen—Appearance of their Huts—Their Interior—Presents—Provisions—Language—Departure for the Ship—Arrive on Board—Remain off the Point—Reland—Search for the Hut—Results—Construction of Huts—Incidents—Return on Board—Progress—Observations—Harrowby Bay—Land at Point Maitland—Deposit a Record—Incidents—Appearance of Land—Natives—Visit to the Shore, and Incidents attending it—Return to the Ship—Baillie Islands—Birds.

On the 24th, the general character of the weather had undergone but little change, the wind still blew fresh, but a little more northerly than before, and we continued working our way between the ice and the

shore, unable to approach the latter nearer than two or three miles ; so shallow is the entire of this coast from the vast amount of alluvial deposit brought down by the great rivers, and the numerous smaller streams, to the shores of the Polar Sea.

Early in the morning, the low beach of Point Warren was discernible, the extremes bearing E.N.E. to E. by S. the land in the vicinity having a more irregular, lofty, and varied character than what we had previously seen more to the westward.

As we approached it, an Esquimaux encampment was faintly discernible, but its existence soon became fully established ; and human forms could be discerned through a telescope. As we advanced nearer, within three or four miles, there were marked signs of great consternation in the camp. I was busily engaged in writing a few hasty lines for transmission to England, when the report of a European being seen, spread rapidly throughout the ship. I rushed on deck under the same joyful emotions that generally prevailed, but I confess I was unable to verify the fact by my own observations. However, I must do the original observers the justice to say, that at the time I took the glass in hand, they informed me the object had disappeared, and that the natives were less numerous. They still stoutly maintained the fact, and believe in its existence to this day.

About 12.30 the first cutter was manned and armed, when Captain M'Clure and myself accompanied

by the interpreter, proceeded to the shore in the direction of the encampment, then distant about three miles, which with the aid of sail and a fresh breeze we soon reached ; but when about fifty yards distant, the boat grounded and a surf, heavy for the Polar Sea, broke over her, which obliged us to be carried on shore on the backs of the men.

As we approached, we were surprised to see only two men and a woman—the latter running about and shouting out lustily in their native language—the women in the back ground carrying something which we found out afterwards were arrows. The huts four in number, appeared deserted. A mound was likewise discernible about 100 yards from them in which a pole was placed, and a piece of skin or some such thing suspended from its top ; this, the interpreter pronounced a grave, probably of a European, which coupled with the previous report increased our anxiety in no slight degree. Captain M'Clure then expressed a wish that I should examine it, to which I gave a ready assent, considering it of great importance. As we were about to land, the men continued to utter the most discordant yells and threats to deter us. We had previously made the usual friendly salutations with the extended arms repeatedly, but instead of the customary recognition, we were greeted with wild gesticulations and more angry denunciations than before.

The Captain and myself being the first on shore

proceeded towards them, I carried my gun, and a seaman a short distance behind had another. Matters then bore a hostile aspect, but we still advanced with the most friendly intention, in vain endeavouring to confirm this by signs. The two men with "bended bow and quiver full of arrows," appeared momentarily in the act of commencing an assault. They took aim, with hair streaming in the wind, agitated by all the fierce and angry passions of their nature, and bounding to and fro, brandished knives, with all the lightness and agility of expert hunters, and the savage wildness of enraged, uncivilized man. I have seldom viewed anything with more admiration than this display of courage and determination on the part of two men, to resist the approach of twelve to their encampment, which they appeared resolved at any hazard to defend. All our efforts at pacification having proved useless, we stood fronting them a few yards distant, in full expectation of seeing an arrow fly; when the interpreter, who had been the last to leave the boat, joined us, wearing a skin coat fashioned after the style of that worn by the Esquimaux, which at once attracted their attention. He addressed them loudly to overcome their noise, but in friendly terms. This appeared to mollify their wrath a little; but they were still wildly excited, pointing to the gun I carried, and that borne by the seaman in the rear.

The interpreter again vainly addressed them.

They would hold no intercourse, or allow us to approach nearer, unless we removed the guns, for which they appeared to entertain a great horror, and no less dread of the ship then in the offing, to which they frequently pointed. The guns were at once placed on the ground, but that would not satisfy them. I then handed mine to one of the men a short distance behind me, with no better result. They still resolutely repelled any advance until the guns were placed in the boat, then about one hundred yards distant. We could have been under arms in a few minutes in case of treachery or surprise, so acting on the advice of the interpreter, they were removed.

Having given them proof of the friendly character of our visit, of which we again in words assured them, at the same time presenting a piece of tobacco to each, the whole aspect of affairs underwent a complete and sudden change. The Esquimaux approached, I am happy to say, without rubbing noses, and in their altered expression and demeanour, evinced a desire at once to cultivate friendly relations, allowed us to examine their bows and arrows, and by our desire fired at a mark—a piece of driftwood fixed in the soil about eighty yards distant—when they elevated their bows in an instant without apparently taking aim, and pierced its centre; affording us ample evidence of what good targets we should have made for such unerring marksmen.

We then offered them several presents with which

they appeared greatly delighted: a little scarlet and blue cloth we gave them, was particularly valued. They presented Captain McClure and myself with an arrow, and the bond of peace became then firmly cemented. They called the woman, who hitherto had stood in the background with a bow and several quivers of arrows, in expectation of an encounter, that she also might receive some presents. A fourth, and not the least interesting object of the group, had a short time before come out of one of the huts, and attended by the woman (his mother) sat before it, with bow and arrows ready for use; he was in a crippled state, as we perceived on inviting him to join, by his approaching us hopping on two sticks, when he also was conciliated by our bounty. On inquiring, through the interpreter, I was informed that he suffered from an injury received in hunting; his mother at once came forward, and removed his moccasin, as well as a piece of skin which covered his leg, with a degree of care and gentleness not always practised in more civilized life. I was shocked at the appearance which this poor fellow's limb presented—the foot and lower part of the leg being in an advanced state of mortification, filthy in the extreme, from water never having been used; and the only covering was a piece of hard skin in the same filthy state. As the disease would inevitably be attended with the loss of the limb, and very likely of existence, I was anxious to get him on board, that it might be at once removed,

with the view of saving his life. To this proposition they were at first disposed to accede, but it was subsequently declined. I, therefore, recommended what was best to be done, but with little hope of its being attended to. In time, no doubt, he will be a victim to the savage custom of his race, described by the interpreter. As soon as the tribe leave the encampment for a trading excursion, the parents will take him to the summit of the highest land in the neighbourhood, and there leave him to perish. From the parental care I saw manifested in this case, I was unwilling to believe they would subject him to such a fate; one, however, which is, I believe, generally received with resignation.

I was greatly interested in this poor young fellow, as he was much the finest specimen of his race we had seen; in stature tall for an Esquimaux, about five feet eight inches, and quite unlike them in his general features and aspect—which led us to suppose that Indian, or even better blood, ran in his veins. He had an aquiline nose, large black eyes, a most pleasing expression of face, and his faint smile on being questioned, displayed his regular well formed teeth to much advantage. The interest we felt in his fate was much increased, by his quiet subdued manner—making no complaint as he appeared to feel no pain—and from the determination he evinced to defend his fireside to the last.

Notwithstanding the savage fury of these Es-

quimaux on our arrival, their subsequent conduct was kind and gentle, to a greater degree than we had before observed in people of the same race. Their dress was of the usual character formed of reindeer skin—the fur next the body. They were of middle stature, strong and muscular, and the fierce expression of their swarthy countenances, was increased by the long dishevelled hair flowing about their shoulders. They looked the lords of the dreary coast on which we stood. I was glad to perceive the hideous labrets were not worn by these people, as I believe the custom is peculiar to the tribes inhabiting the lands westward of the Mackenzie. I also observed that the tattooing on the chin of the women, was different to what we had previously seen; instead of one broad line and two smaller parallel ones, a series of dotted lines extended from the lower lip to the chin, forming one band about an inch in breadth; their feet and hands were of characteristic beauty and smallness.

At their request we adjourned to a newly erected hut, entirely composed of wood. It differed from those of Esquimaux, more closely resembling those of the Indians, being formed of stakes placed upright in the ground about six feet high, either circular or oval in form, from which others inclined so as to form a sloping roof. On entering, we found a large fire of driftwood burning in the centre of the floor, on which were pieces of reindeer's flesh being cooked, but

as black as charcoal: our visit having evidently led to its being neglected. Here we learned the following intelligence through the medium of the interpreter.

The elder of the three men was the chief of the tribe, the two younger were his sons, and the woman his principal wife, as polygamy exists amongst them. The first was a fine active looking man, much resembling his crippled son in feature; he wore a stunted beard, and a moustache represented by a few grey hairs; conveying to me the idea that he had seen some fifty winters in this dreary clime. The ship having been observed at an early hour in the morning off the coast, her appearance had caused the utmost consternation amongst the community, which in numbers amounted to about one hundred. They could not form an idea as to what she was, but frequently pointed to her, shouting aloud as if conveying intelligence to others of the tribe—who not being visible, led us to suppose that they might be concealed in our neighbourhood. On the approach of our boat, all the men, women and children, from their account, had taken to the boats.

We observed, in the direction they pointed out, two baidars, filled principally with women, as well as we could discern, waiting, in a deep inlet to the eastward, the result of what was going on at the encampment. The old chief said they had left all their property, and that he and his family would have fled

also, were it not that his crippled son could not be removed; and they resolved not to leave, but defend him to the last, had we given evidence of any hostile intention. They were at war with the Indians to the southward, and their brethren to the eastward; so that these savage subjects of our most Gracious Queen, carried on war pretty extensively on their own account. Some of their arrows were double-barbed, with serrated edges; and bore evidence of recent conflict from the presence of blood-marks; but whether of man or the reindeer could not be determined. They said they often fought, and some of their enemies might be killed; but that they were seldom able to ascertain the fact. They reside at this place throughout the year, do not go inland where their enemies reside, nor do they carry on trade with the Hudson's Bay Company, or their traders; the only intercourse they have, being with that tribe of Esquimaux whom we met with at Jones' Islands, and whom they travel over the ice to meet in the spring, midway between their respective encampments, for purposes of barter. Through this channel all their trade is carried on with the Russians, and not with the Company in whose territory they reside. The reason they assigned for not doing so, when questioned, was, that some of the Indians had been killed by fire-water (spirits), which some traders had given them to drink; and they feared that they might be treated in the same way. This statement is given as nearly as possible in the words in which it

was uttered; and, if such a practice exists, it is reprehensible in the highest degree. They appeared much pleased when we mentioned the name of "Attawan" the chief of the tribe with whom they traded, and of whom I have previously spoken. Our having seen and communicated with him, as we informed them, increased our intimacy to a considerable degree, and, on the interpreter presenting the woman with a string of beads, she said she would become his mother, offered to get him a wife, if he would remain with them, as they looked on him as one of themselves, from the mode in which he was dressed.

As I stood at the fire next to the old chief, I observed a button suspended from his ear, worn as an earring, which, on examination, I found to be a flat metal button of English manufacture, with the word "London" stamped in a circular form on its inner surface. I immediately directed Captain McClure's attention to the circumstance; and inquiries at once began as to the mode in which it came into his possession, when we heard the startling intelligence that an Indian, *like ourselves*, as they said, *had been killed not far from where we stood*. The name of Indian is applied to all people dissimilar to themselves; and the interpreter concluded it was a European; but when the deed was done, it was impossible to determine, from their inability to compute time with accuracy. The son who was about twenty-seven years of age, said, on being questioned, it might have been last year, or when he was a boy; but on this

point we could not in any way ascertain the truth, and were left in a state of painful anxiety. It appeared that a party had landed on the extreme of Point Warren, distant from where we were some three or four miles, continuous with the main land, where they erected a hut similar to the one we were in, of an oval form, nine paces in length and six in breadth, formed of wood cut with a knife ; and they expressed great desire to have an axe or hatchet, of which they appeared to know the use. The old chief expressed his willingness to accompany us to the locality, and, indeed, appeared anxious that we should visit it ; but his offer was declined. The alleged Indian had approached their encampment alone, was guilty of some indiscretion which excited their fury, and led to his being murdered and interred in the mound, which the interpreter had rightly judged to be the grave of a European. They also informed us that the man who had killed him had fled from the encampment that morning in his "kayak," on first seeing the ship, fearing that we had come to chastise him or his tribe for the offence, in accordance with their own savage custom of revenge. Could this circumstance have accounted for the appearance of a man in European costume, as reported by several persons on board ; the only vestige of which that we could discover, was the button I had noticed ? An examination of the grave, as originally intended, might have cleared up this very mysterious story ; for the preservative powers of frozen soil would keep the

body for years in a state of freshness; and I regretted then, as I still do, that this was not permitted. The remainder of the party had gone inland after the occurrence; but we could not learn if they were aware of it. To visit the hut they had erected, became an object of great interest: that the locality might be explored for any recent traces of voyagers, and that the truth or falsehood of the statement might be established; but of the murder there could exist no doubt; before doing so, however, Captain McClure decided on returning to the ship. They told us of their having seen two boats the previous summer (1849) going to the eastward, and again soon returning to the westward towards the Mackenzie; but more we could not ascertain, as neither had communicated. It must have been the party of Sir John Richardson, or that of the 'Plover.' The former did not, however, return to the Mackenzie, having proceeded overland from the Coppermine River.

We visited their huts, eight in number, all of which, with the exception I have mentioned, were composed of skins supported by poles. One end was of a conical form, like that of our ordinary field tent. This was the sleeping apartment, and was separated from the other by a skin curtain of a quadrangular shape; the last filthy and disorderly to a degree, as it was used for all purposes except sleep. The family congregated together in the conical part of the tent, like animals, for repose, on a couch formed of reindeer skins spread

on the frozen soil. As a proof of their sagacity, this end of the tent was always pitched to windward, as presenting less resistance than the other to the force of the blast. I observed the only cooking utensil was hollowed out of stone, and fish had been recently boiled in it. All their implements for hunting and fishing were strewn carelessly about, evidencing a hasty departure of its occupants. The filth of these huts was truly disgusting, and the odour arising from it such as seldom assails the olfactory nerves. The pasturage was rich and luxuriant, and animals, no doubt, plentifully abound; of this the ground in the vicinity afforded ample evidence; and their great success in the chase, from the number of bones that were strewn about, chiefly of the reindeer, whale and seal, was fully confirmed by the quantity of provisions that we saw, consisting of dried reindeer meat, fish, whale blubber and ducks, buried in large holes in the ground. We procured a good number of ducks (pintail and eider) from them, and made many presents in return. They were particularly pleased with a saw we gave the son—the old chief telling us that he and his son shared alike in all things; and from the events of the day, I could not but conclude that a stronger attachment existed between the members of this family than is usual amongst these wild, uncivilized people. The language is nearly identical with that spoken by the natives of Labrador, and somewhat different from that of the

tribes to the westward. It is a pity that the laudable efforts of the class of Missionaries that spread Christianity amongst the former, cannot be traced along this coast.

We took our departure at 3.30, leaving the party highly gratified by our visit. Having got safely through the surf, we reached the ship, then "lying to" in the offing, thoroughly drenched. It was then determined to steer us near Point Warren as possible, that we might make a search for the hut. But the fog increasing, the land was shut out from view for the remainder of this tempestuous evening. Our visit was consequently deferred; and, for this purpose, the 'Investigator' stood off the Point for the night.

On the following morning, Sunday 25th, at 3 A.M. we again left the ship in the first cutter, and proceeded to the shore in the immediate vicinity of the Point—a cold northerly wind blowing off the ice, and the sky cloudy and overcast, imparted a cheerless aspect to the morning. We soon reached the shore and encountered the same shallow water and surf as yesterday, through which we waded to the beach. Immediately on landing, some marks were observed on the sand, much resembling those of a boot, but they were so indistinct, and not being elsewhere observable, I am not disposed to attribute any degree of importance to them. We met with no Esquimaux, but saw two deserted huts about five hundred yards

from the beach, which were assumed to be those we were in search of; an inlet intervening, obliged us to describe a considerable circuit in our approach.

We had thus found two instead of one, and I began to doubt if this was the exact locality, for an Esquimaux point might have a more extensive signification than we attach to the term. It was, therefore, much to be regretted, that we did not revisit the encampment and take the Esquimaux chief for a guide.

The huts were constructed of driftwood, turf filling the interstices, and were similar in form to the one already seen, but less capacious and lofty; the architect had evidently much improved on the original design—assuming these to have been the structures alluded to. One was in a more dilapidated state than the other; neither of them presented an appearance of having been recently occupied, nor was there anything by which we could establish the fact of their having been the residence of Europeans. While our party proceeded along the coast for a short distance, I remained with two men, to examine thoroughly the most perfect, but failed to discover any trace of civilized man. The floor sounded hollow under foot, and on removing some wood, we found an excavation beneath, which had evidently been a *cache* or store-house, as it contained a few bones of animals, a portion of an old wooden Esquimaux utensil, and a small piece of ivory pierced with holes, similar to

what they wear about their person. These and the remains of an old kayak lying outside, proved their former occupation by Esquimaux, which of course might have been subsequent to the original occupiers, but there was no proof that we had reached the proper locality. Nothing further was discovered. In an excursion along the shore on the opposite side of the point, a fishing net indicated one of the fishing stations of the natives. The soil was generally swampy, with numerous ponds of water interspersed over its surface—a peculiarity of all the points of coast we had visited; some were worthy of the name of lakes.

On our return to the boat, we found that she had become imbedded in the sand, and as the water had receded a little since we landed, it had much increased our difficulties in getting her again afloat. This was only accomplished by our united efforts and perseverance, when we again got safely through the surf, made sail, and reached the ship after four hours absence.

As we continued our progress along the coast, under circumstances similar to those I have mentioned, there was marked evidence of an advancing season. The temperature had become lower, and had a less extensive range during the day, from 30° to 35° , together with cold northerly winds, sleet and snow. The sea-water had increased in density to 1020, with a temperature from 33° to 35° . The

birds were less numerous, and appeared generally going to the southward—unmistakeable proof that summer was drawing to a close.

On the 26th, we sighted the low land of Phullip's Island, close to which we saw two Whales; and were enabled to tack fifteen miles to seaward, when we reached loose sailing ice. Much of a heavy character was observed grounded along the coast, and shoals appeared to abound. Cape Brown was passed in the evening, and on the 27th we had reached Cape Dalhousie, to the eastward of which we found a current setting to the south-west eleven miles in twenty-four hours. A tidal line was also observed extending from N.E. to S.W. but there was no difference in the density of water on either side; it decreased to 1018, however, some hours afterwards. Nothing of any consequence occurred to call for observation, or enliven the cold, cheerless character of the weather, until the 30th, when we sighted Nicholson Island and entered Harrowby Bay. When at 8 A.M. a mark having been observed on the land, Mr. Samsbury (mate), and myself, accompanied by the interpreter, proceeded in the third whale boat, with orders to examine it, and deposit a record of our arrival, &c, the ship lying to, about two miles off shore to await our return. On reaching and examining the object which had attracted our attention, we found it to be nothing more than a small mound of earth with a pole in the centre—one of the usual

Esquimaux marks to identify locality, as we had frequently met with them on other points of the coast. Close to it, we saw the wood belonging to two sledges, carefully placed together for future use—near them were a few spots, where the soil appeared to have been lately disturbed, and on seizing the turf it readily came up, revealing to our view an excavation containing a great quantity of fish and ducks, which we left untouched, having carefully replaced the earth as we had found it. There could exist no doubt that we had reached the hunting ground of a tribe of Esquimaux, whose encampment might be either distant or remote, but as our orders were imperative to return at once to the ship on the completion of our duty, we had no time for further exploration.

We erected a mound and deposited a bottle containing a record of our proceedings ten feet to the magnetic north. We failed in procuring a piece of driftwood of sufficient size, to make the mark conspicuous, and were reluctantly obliged to take a portion of one of the sledges for the purpose; the native marks on which we removed, and cut a broad arrow on its surface, together with the ship's name. While this was in process of erection, I made a hasty run over the land, procured several new botanical specimens and a few small birds, viz. Sanderling (*Calidris Arenaria*), Snow Bunting (*Emberiza Nivalis*), and Turnstone (*Streptilas Collaris*), several of each

were seen. The land was more elevated than any we had previously visited, but flat, forming a continuous plain; the soil was of rich loam, with peat superimposed in depth from twelve to fourteen inches, and the pasturage everywhere luxuriant and abundant—no doubt a favourite resort of animals. I also observed several small lakes or ponds on its surface, containing good fresh water.

Soon after our return to the ship, we stood in, as close to the land as was compatible with safety, along its north-eastern coast, proceeding towards Baillie Islands. Two figures were seen standing on the high plain we had visited in the morning, a few miles more to the northward. Considering them as evidence of the presence of others, it was determined to close the dispatches, and commit them to their charge, as we might not again have such an opportunity; assuming that they were a portion of the tribe we expected to meet at Cape Bathurst, to which we were then proceeding. Accordingly, at 1 P.M., the first whale boat and first cutter were manned and armed. Captain McClure and myself, with the interpreter, proceeded in the former; orders being left that the latter, which was to convey some of the officers who wished to take advantage of whatever sport the country afforded, should not leave the ship until we had reached the shore, lest our numbers should cause any unnecessary alarm amongst the natives. The interpreter was placed standing, a conspicuous object

in the bow of the boat. His costume so closely resembled that worn by the natives, that they could have no difficulty in its recognition; and as we knew that our flag had before waved over this icy sea, we unfurled the white ensign of St. George, in the hope of its also being recognized; feeling certain it would remove whatever apprehension our approach might create. As we neared the shore, the two figures disappeared, but soon again presented themselves, attended by several dogs. They proved to be two women, who joyously returned the signal of friendship which we then made. The boats grounded a short distance from the shore; and we were again afforded an opportunity of testing the qualities of our water-boots, by wading. We landed on a soft mud beach, and ascended a bank of about 80 feet high; in some places quite perpendicular, at others inclining at an angle from 15° to 20° . They formed gullies which facilitated the ascent. We reached the summit of the wide extensive plain on which the women stood, and trod on the same luxuriant soil we had visited in the morning. The women, the younger of whom carried a child on her back, about fifteen or sixteen months old, after the fashion of her country, received us with demonstrations of gratification, as if accustomed to the sight of Europeans, but without the nasal salutation, with which we could very gladly dispense. We commenced an animated conversation through the medium of the interpreter. They appeared intelligent,

and cheerful; laughed incessantly, which could only have been from their delight in meeting us, as there was nothing we could discover to excite their risibility. We learned that they stood towards each other in the relative position of mother, daughter, and granddaughter. The former might have seen five-and-forty summers, and her daughter some sixteen or seventeen less; but both appeared much older in face than their activity and smartness indicated. All the men of the tribe were away fishing and hunting some distance, and they pointed to the north. We assumed that they meant Cape Bathurst. These women were living in a hut only a short distance further along the coast, from whence, they said, they would conduct us to their encampment. Accompanied by them, and the party from the second boat, we proceeded at a good pace along the plain, close to the bank—the two boats pulling at the same time along the shore. The women were very jocular and amusing on the march, and gave ample evidence of the muscularity and strength of their limbs; and, certainly, I never saw firmer, more compact, or much better formed supporters in any of their sex before. The hard, well-developed muscle plainly showed the occupation of their lives. They were much amused on seeing one of the officers, when landing from the cutter, sink so deeply into the soft mud, that it was with difficulty he was extricated, and then only with the loss of his long boots, which were completely embedded. On observing him afterwards take

a small quantity of spirits from his flask, to counteract the chilling effects of his immersion, seeing it was of a clear colour, they at once pronounced it poisonous, and similar, they said, to what the traders to the southward had given the Indians, which killed them. This was the second time we had heard a similar story, since entering the Hudson's Bay Company's territories. On our informing them that the officer only took it as a medicine, the younger immediately complained of pain, and requested to have a little. Her taste was gratified. She took but a small quantity, which she again spat out, and expressed her great dislike of it.

We soon found that they had not a very accurate idea of distance. They had at first assured us that their encampment was only at a short distance; and the same story was repeated after walking about four miles; but, in the hope of soon reaching it, we continued our advance. From them we learned that a party consisting of two boats and ten Europeans,* had been on the coast two years before—meaning two summers—doubtless, the one under the command of Sir John Richardson—and that they had pitched two tents and stopped two nights a short distance further on. As I was rather curious to see where my friend Sir John had bivouacked, I requested

* We could not clearly understand the exact number from their inability to reckon above ten. The party was, I believe, larger.

the interpreter to tell them to be very particular in pointing out the exact spot. As we proceeded along the coast, its regularity of outline was occasionally interrupted by shallow indentations, forming little crescentic-shaped bays, well sheltered on either side by the high land, which steadily increased in elevation as we advanced; and in one of these little sheltered bays the party had passed the night. The site of their bivouac is now marked by an irregular-shaped mound, formed of earth, driftwood and stones, beneath which is buried their winter stock of provisions. The Esquimaux women entertained a perfect recollection of the Chief (as they said) and his party; told us several amusing stories connected with their visit, and showed us beads, rings, and other articles which they still wore in fond remembrance of the intrepid voyagers, who had evidently left a most favourable impression, as they laughed heartily when we mentioned them.

On being informed that Captain McClure was a great chief, and that I was a great medicine-chief from a far country—being the only two of whom they made enquiries—they allowed us to proceed in front, and maintained every sign of respect for such distinguished characters as we should have been accounted amongst the tribe. We still continued our march, without observing the least trace of hut or habitation of any kind, until one of our men,

whom we had sent on as *avant-courier*, carrying the ensign unfurled, waved it as a signal of success.

I was much struck with the sagacity manifested by the native dogs, and the vigilance displayed by them in watching our movements on this short journey. Captain McClure and myself being a short distance in advance of the women and the interpreter, were guarded on either side by one of them; two attended the women, one advanced to the hut, and the sixth brought up the rear; and, as we approached the hut, they took up a position in front of it, evincing every desire to aid in its defence, if necessary—proving how truly valuable they are to the Esquimaux.

We, at length, reached another of these little bays, about five miles distant from our original starting-point, and found on the inclined plane of its southern aspect, one solitary, miserable-looking hut, instead of the encampment we had been led to expect. Our standard-bearer having found it without an occupant, had quietly taken possession of it, and hoisted his flag on its summit, where we saw it waving as we approached. This was one of the smallest and most wretched-looking habitations we had seen, merely consisting of skins, chiefly of reindeer and bear, thrown over a few poles united at top, in form of a triangle, and not more than six or seven feet high. It was extremely filthy inside, with a plentiful supply of fish (salmon), and dried deer's flesh strewn around, which

apparently assisted to form a couch for its occupants. To afford a proof of the excellence of this diet, one of the women took up a fish in a semi-putrid state, and ate it in our presence with zest and avidity. Fish plentifully abound on this part of the coast, which they call Salmon land. Several nets were set on the beach, made very ingeniously from the ham-string tendons of the reindeer, about twelve or thirteen inches long, knotted entirely by the hand. We obtained a considerable quantity of fish in return for the presents we made. Captain McClure being desirous of obtaining a white bear skin which covered their hut, bought it for a copper kettle.

Nothing could exceed their civility to us. They appeared surprised we did not indulge in raw fish as freely as themselves, and were exceedingly anxious that all our party (twenty-five in number) should stop for the night in their wretched hut. They offered us many inducements to do so, and among others that they would summon the rest of the tribe to meet us and make merry. I was much struck with the appearance of the child, who was evidently more European in features and appearance than any I had yet seen amongst them. They did not evince the same degree of surprise at the great oomiak, as they called the ship, as the other tribes we had met with. They gave us to understand that the boats of Sir John Richardson had similar great cloths like ours, which doubtless prepared them to feel less astonishment at

the appearance now of one of so much greater magnitude. They then told us that two other European boats had been seen a few days before. These we thought they confounded with, and were Sir John Richardson's party, but I subsequently learned that the 'Plover's' boats had been along this coast a few days prior to our arrival, and had returned on their way to the Mackenzie, as I have elsewhere mentioned, and had evidently landed in this neighbourhood. Captain McClure did not consider it judicious to trust the dispatches to these women, but determined to return to the ship, remain off the coast during the night, and seek the encampment of the men further to the westward early the following morning. We then took our leave, the women still regretting our non-acceptance of their hospitality. They waded off with us to the boats, then grounded some distance from the shore. After we had got afloat, the two poor creatures could be seen running along the beach, holding up fish as an inducement to return. They had previously expressed, in the most piteous tones on parting with fish in barter, that they should all die in the winter from starvation.

We reached the ship at 6 P.M., and worked up along the coast until darkness set in. We anchored for the night off Baillie Islands, in four fathoms, the weather looking wild and unsettled. The temperature of air had fallen to 27°, and sea-water to 28°. Young

ice formed in the rigging which was showered about us plentifully in working the ship.

When on shore several Ducks and Gulls were shot, and the Great Northern Diver (*Colymbus Glacialis*) was seen for the first time; several flocks of Ducks were also seen all going to the southward—increasing the unpleasant evidence, that the short Arctic summer was drawing to a close.

CHAPTER VII.

Weather—Revisit the Shore—Incidents—The Coast—Cape Bathurst—Encampment—Land on the Isthmus—Advance to Encampment—Esquimaux—Interview and Incidents—Their Hostile Aspect—Altered Demeanour—Appearance of Men and Women—Incidents—Fire Water—Barter—Despatches—Negotiation for their transmission—Return to the Boat—Presents to the Natives—A Gun—A Thief—Their rude Behaviour—War Whoop—Difficulty in clearing the Boat—Leave the Shore—Boat aground—Esquimaux Kayaks—Their Weapons—Mode of using them—Incidents attending our return—Their Visit to the Ship—Invitation to the Encampment—Departure from Baillie's Islands—Visits from Esquimaux and Incidents—Their Account of other Expeditions—Visit, &c.—Expectation of a Ship with Presents—Their Departure from the Ship—Esquimaux, their Habits, Manners, Customs, &c.

THE morning of the 31st of August wore a cold and cheerless aspect; the land, instead of the rich and verdant appearance it presented but a few hours before, being everywhere covered with snow. We had anchored between Baillie Islands and the main land,

about four miles distant from each, and it having been determined to seek the hunting grounds of the Esquimaux further to the northward, early that morning, at 7 A.M., the first cutter was again manned and armed, and provisions taken for twenty-four hours. Captain McClure and myself, with the interpreter, once more took our departure. It was the coldest day we had yet experienced within the Arctic circle, with a fresh biting blast from the westward; the wind having a few hours before forsaken that quarter whence it had so obstinately blown against us.

We resolved on running along the coast of the main land as near as possible to the shore, and stood in accordingly towards a small bay, which proved to be the one we had left the evening before—a good starting point from whence to commence our search for the tribe. The boat grounded as we approached the shore, and the surf breaking pretty heavily at the time, we were obliged to anchor. After some exertion we were again soon afloat, and as the wind was blowing directly on shore, we had to pull out some distance, the water being very shallow. No sooner was the boat observed approaching, than our two friends of the previous day made their appearance, and by word and gesture earnestly besought us to land. Our duty lay in another quarter; they, however, ascended the heights and watched us for a long time.

As we advanced on our way through loose ice, our

progress was arrested from time to time by several little mishaps. The wind having increased considerably in force, it carried away our main-yard, then sprung the mizen mast, and we grounded repeatedly amongst the ice. The coast line presented a succession of lofty headlands, as if each, on becoming exposed to view, was the last, until we got some eighteen or twenty miles to the northward, when that which appeared to be, as it really was, Cape Bathurst, broke fairly on our view. No trace of a human being was anywhere discernible along the coast, with the aid of a glass; and our last hope rested on the Cape we were rapidly nearing. We were about to relinquish the search, supposing the tribe had changed their encampment, and perhaps gone farther inland, when the glass being in my hands, I thought I could discern a figure in motion near the extremity of the Cape. Soon afterwards, a number of huts and many people were discernible; and the anxiously sought for encampment was, at length, discovered on the extremity of the Cape, much to our delight.

The shallowness of the water would not admit of our steering direct. We, therefore, kept on our course towards what appeared a large floe, extending between the Cape and neighbouring island, but which we found on landing to be a narrow sandy isthmus on which the snow was deposited some five or six inches. The boat grounded some distance from the shore, but we tracked her in as near to it as

possible, and at once made our dispositions for advancing to the Cape. As it was difficult to say what attitude the Esquimaux, from their great numbers, might assume towards a party consisting only of eleven persons, and as they had manifested no sign of friendship as yet, but stood silently on the verge of the Cape watching our movements, the muskets were loaded and ammunition served out; five men being left to guard the boat, with orders not to allow any kayaks to come alongside. We landed with three men, one of whom carried a white ensign, and a bag containing the presents, and boldly advanced towards the Cape, then distant about 700 yards. We had got about half way without observing the least movement amongst them, and matters wearing rather a hostile aspect, we considered that our fearless advance, in numbers so few, would convince them of our friendly intentions. Suddenly one of them was observed to descend the cliff, at the base of which were several comiaks and kayaks, seized one of the latter, launched it in a small channel of water, separating the isthmus from the Cape, which was in some places quite fordable, and made way towards us. In a moment, all the others, as if by preconcerted signal, followed the example, and in a few minutes the whole tribe advanced rapidly towards us. They left the kayaks at the stream, and ran wildly along the beach, yelling loudly—their long black hair streaming in the wind. Carrying their bows ready for use, they

unsheathed their long bright knives, and brandished them in the air as they advanced. All the women followed with supplies of arrows, presenting a picture of hostility, which left little to be understood of their intentions. We halted in a line to receive them, our guns being ready for use, if necessary, and made the signal of peace—the interpreter at the same time calling out lustily that we were their friends, which induced them to pause when a few yards distant, still vociferating loudly as to our intentions. Their numbers rapidly increased, several oomiaks filled with men and women having left the shore to reinforce them, all armed. Some of the latter carried long spears, and there being then not less than ninety or a hundred present, with an evident desire on their part to close around us, we drew a line on the snow across which neither party were to pass. This mode of preserving order they at once understood, as if the custom existed amongst themselves; but while they evinced a readiness to comply at one moment, in the next, the line of demarcation was passed, and we became nearly surrounded by them as before. This went on from time to time, requiring the utmost trouble on our part to keep them back; the interpreter being all this time in conversation with the chief and principal men of the tribe, assuring them of our friendship, and the peaceful object of our visit—being in search of our lost brothers. As the interview progressed, we observed several of them return their arrows to the quiver;

others handed their bows to the women; but the knives were returned. We then considered that the indications of hostility they had manifested were at an end, at least, for a time.

The guns we carried were evident objects of attraction, and a japanned botanical case slung across my back much excited their wonder and admiration—its reflecting surface adding, no doubt, greatly to their surprise. A clever attempt was made to steal a brace of pocket-pistols it contained, and I was obliged forcibly to wrest them from the thief. They made several playful endeavours to get the muskets out of our hands but this was firmly resisted; and other attempts at familiarity also required us to maintain an appearance of determination.

The information they gave us was similar to what we had received from the women on the previous day; and nothing additional was then elicited. The tribe appeared to be composed of young, active, muscular men, and the women were decidedly better-looking, with more vivacity and cheerfulness than any we had met with. I fancied that I could trace the outline of Indian features in several of both sexes; the dress of the women particularly partook in some degree of that worn by the Indian tribes, and differed from the costume of their race along the coast. In the men, there was an absence of the labrets; but several had the septum of the nose pierced and transfixd with a piece of

ivory, some three or four inches long, a blue bead ornamenting either end. Sundry emblems of their success in the chase were worn suspended from their deer-skin coat; chiefly the head and neck of the Great Northern Diver, skins of the stoat or ermine, and other small animals—all intended to convey an idea of their individual prowess. Tatooing was common amongst them; and the captors of Whales were each honoured with one line extending outwards from the inner angle of the eye across the cheek; for each one taken, the captor became entitled to an additional mark. They had caught a Whale only a few days previous, and had been busily engaged in feasting on, and flensing it, on our arrival. The captor was pointed out to us. He had received his line of tatooing; it was the first he had taken, and was evidently very proud of the honour, and the high position he now occupied among the tribe. He was one of the finest and most intelligent-looking among the young men; and, on the strength of his capture and general success that season, had taken to himself a second wife; the number being proportioned to the wealth of the husband, and his ability to maintain them. They all had the appearance of expert hunters, and ran with great celerity. They said they were about half as many at the encampment as were present; so that we estimated the strength of the tribe at one hundred and fifty persons. They would all leave the Cape (except one family,

which remains throughout the winter) in about three weeks, as soon as young ice covers the sea. They then proceed to that part of Harrowby Bay, where we had discovered the sledges, birds and fish, until the ice acquires strength sufficient to admit of their travelling, when they go westward to meet a tribe from the Mackenzie, with whom they trade, the latter trading with the Indians, who are in direct communication with the Hudson's Bay Company's agents. They repeated the accusation of the fire-water having been given in barter, and its fatal results. On inquiring as to the value of a silver fox-skin, and the amount it realized in barter, they confirmed a story we had heard from the women the day previous, that for three of those precious skins they had got from the traders cooking utensils, which we estimated at eight shillings and sixpence. I may mention that the skin of the silver fox is one of the most valuable furs, and at the annual sale of the Hudson's Bay Company varies in price, sometimes being as high as twenty-five or thirty guineas, so that an idea of their profits may be formed when we consider the amount of the original cost. How much the condition of those poor creatures might be improved under the influence of *free trade*.

They were at war with the Esquimaux, whom we met at Point Warren, and with some tribes of Indians to the south, which quite corresponded with the accounts received at the last-named locality; and, I

have no doubt, from their appearance, they are as valiant in war as expert in the chase. The women were tattooed with the usual lines on the chin. I was astonished to see so many young wives and mothers amongst them; one, in appearance and expression, much the most interesting of the whole, had a good complexion, large, dark, sparkling eyes, beautiful pearl-like teeth, aquiline nose, a most luxuriant crop of raven-black hair, small and delicately-formed hands and feet, and her pleasing features radiant with smiles of cheerful good-humour, much excited my interest. As I advanced to make her a present, she put a hand behind her back, and drew forth by the legs a naked infant only two days old, carelessly exposing it to the cold and snow then falling. She appeared, also, much too youthful to be a wife. The child betrayed no sign of uneasiness; but I directed it to be returned immediately whence it came. Several children, or rather infants, were similarly treated; and, as the mother's pointed to them, it was evidently done, no less to excite our sympathy than our liberality.

We commenced negotiations for the transmission of the despatches with the head of the tribe, and the elder members of it. We made them thoroughly understand their nature—that *they were words to our brethren in a far country*—which, if delivered safely, would be more valuable to them than a Whale, as they would receive many presents. They faithfully pro-

mised to do what was required. We now became on more intimate terms; and they invited us up to the encampment; but the interpreter did not consider it prudent, from what he judged of their character, to accept the invitation, and recommended that we should return to the boat, and distribute the presents, which to expose then might be attended with danger, by exciting their cupidity. We, therefore, turned towards the boat, followed by all the men, women and children—a wild and picturesque party. Each of us appeared to have a group of followers; the women laying hold of our arms, and attempting to walk with us in European fashion—a degree of familiarity it was not safe to allow with a people generally treacherous and deceitful. They are, in this way, frequently made the agents of the men, when an attack or plunder is premeditated, instances of which are narrated in the early journeys of Franklin and Richardson along this coast, when the women laid hold of the men's arms in the boat, with a view of ultimately overpowering, and rendering them unable to offer resistance. While thus walking, some of our people had their pockets picked, the thief taking advantage of their arms being held by the women. On reaching our boat we found a few kayaks had preceded us. They now became exceedingly clamorous for presents; and a line of demarcation was again drawn on the snow, only to be passed as before.

The despatches were delivered to the chief of the tribe, and a gun presented to him as his reward for their safe care and transit, which he received with eagerness and delight. We fully instructed him in its use, and loaded it in his presence. He fired it with great coolness, amid a general shout of joy from his brethren; a hundred rounds of ball cartridge were added to the gift. On receiving the gun, the young men and warriors of the tribe returned to the Cape, with a view of getting their kayaks and escorting us back to the ship—the older men and women remaining. We distributed many presents, consisting of knives, scissors, files, beads, hatchets, kettles, boilers, with needles and pins to the women, with which they appeared greatly delighted. The boat was then ordered to be got afloat; but several who surrounded her in the water appeared but little disposed to let us depart, and held on by the gunwale; a few of the women had actually got into the boat despite the best efforts of our men to prevent them, and could only be removed by force. One of them, a bold, Amazonian-looking creature, was a most audacious and determined thief. She had made an attempt to steal several articles, and had actually succeeded in taking the boat's compass out of the binnacle, and concealed it in her bosom beside her infant: when observed, it required some force to take it from her. One of the men endeavouring to retain it, was immediately thrust out of the boat, but made repeated

attempts to get in again. They became exceedingly noisy and clamorous, more particularly when they saw many articles intended for presents still remaining, which so greatly excited their cupidity that, as I was subsequently informed by the interpreter, they gave the "war whoop" for attacking and plundering the boat—a circumstance that we, who were ignorant of the language, were not then aware of. All the warriors of the tribe had previously taken their departure; otherwise unpleasant results might have ensued. The remainder of the presents were issued to them, when we made them aware that we had nothing farther to bestow, and asked them to assist us in getting the boat afloat, which some of them did. We did not obtain much information from them with regard to the existence of land to the northward, of which they appeared to be quite ignorant. They said the land of the White Bear was in that direction, at the same time pointing to the north, which subsequent experience fully confirmed from the great number we saw of these animals, and they appeared to entertain an accurate idea of their prowess and ferocity; one of the women uttering a piteous tale of her child having been carried off by a bear, a short time before, close to where we stood.

After great trouble and exertion we succeeded in getting the boat afloat, when we again made sail and took leave of our friends on the beach, followed by a mosquito fleet of seventeen kayaks, which had

joined to escort us back to the ship—as the water was very shallow, one of them in his tiny craft, piloted us clear of the grounded ice and shoals. It was beautiful to witness with what tact and dexterity they were managed, and rapidly propelled through the water. They are elegantly and ingeniously constructed of seal skin over a whale-bone frame work, the former being sown with the tendons of the reindeer, and a bone needle, when no other can be procured. They are extremely buoyant, propelled by a single paddle, are generally about sixteen or seventeen feet in length, and weigh about forty-five pounds, so that they can be carried on the shoulder with ease. They contain all the implements of war and the chase, everything in its place, so that an Esquimaux in his kayak, is provided with all he can possibly require, and has ample room for a good supply of food.

They were resolved to proceed to the ship, then distant about ten miles. Several preceded us, and it was beautiful to witness the regularity and order of their advance—maintaining a proper distance between each, which did not vary in the least as far as we could observe. We were anxious to witness a display of their skill when in chase of the Whale, in the use of the spear and harpoon, which they throw with great dexterity, recovering the weapon with wonderful rapidity. These harpoons have a piece of inflated skin or the bladder of animals attached to the upper part

by a tendonous cord or a Walrus hide thong; and when thrown, the barbed portion becomes detached from the shaft, when it hits its object, the skin still adhering to it. In this way, a Whale is pursued by the men in kayaks, and receives such a number of these wounds in quick succession as it comes to the surface, and becomes so worried and exhausted from loss of blood, that escape is very rare. The spear was also thrown with great accuracy; the heads of these and the harpoons are for the most part made of bone; flint is sometimes substituted both for them and arrow heads—some of the latter were made of iron.

The wind continuing from the west was against us, and we were obliged to work through floe ice, which much retarded our progress. The kayaks did not follow us, but wisely kept on a straight course, and when ice came in the way, the Esquimaux landed on it, hauled up their little boats, emptied them of any water they contained, and carried them across the floe, launching them on the opposite side, when they again proceeded on their way. On clearing the ice, there was a little sea on; but they, nothing daunted, kept on their course towards the ship. One of them had detached himself from the others and followed in our wake—the sea washing over his little kayak, of which he appeared quite regardless. He excited our compassion, and we invited him *and his boat* on board, which he accepted, and the latter was soon

safely stowed in our capacious cutter. The poor fellow being wet and cold, we gave him some bread and meat, but he evidently did not relish it so well as the blubber and other food familiar to him ; and placed it in the kayak. We made him several presents for his wife and little son, of whom he reminded us. In tacking from time to time, he, as it blew fresh, and the cutter inclined much to leeward, betrayed evident signs of alarm, and clung tenaciously to the man sitting next him ; no doubt he would have felt himself much more secure in his own little craft.

We reached the ship about 6 P.M., after our long but very interesting excursion, wet and cold, it snowing heavily at the time. Before going on board, we presented our friend with the boarding pike and white ensign, under which we had met his tribe, and he appeared much gratified. The greater number of the kayaks that had left the shore were alongside, and were hoisted on board with their owners generally occupying their seats.

Numerous amusing incidents occurred during their short stay, and they participated largely in the bounty of the men, who gave them a great quantity of clothing, &c. One was immediately converted into a marine, and it was amusing to witness him as soon as he was equipped in the uniform, going to the gangway, and holding up legs and arms successively to his astonished brethren alongside ; displaying his

new costume with which he appeared uncommonly well pleased.

We weighed anchor and stood to the south-east to get clear of the islands, and our Esquimaux friends were obliged to take their departure. Before leaving the shore, the old chief, a man about sixty-eight years of age, had civilly asked us to stop the night at the encampment, offering to place his tent at our disposal; and as they had killed a Whale, he promised us a rich repast on its delicious blubber. It was evidently a period of feasting with him, as is always the case when success attends their efforts in the chase.

On the following morning, (Sunday, September 1st) the weather had become milder, and the sun's rays shortly dispelled much of the dreary aspect of the neighbouring lands. We had reached within about six miles of Cape Bathurst, which bore N. by E. and with a light wind, we continued to move slowly along. Towards noon, two kayaks were observed coming out in the direction of the most northerly of the islands, gliding swiftly and gracefully over the surface of the sea, which they barely appeared to touch, dexterously propelled and guided by their solitary occupants, by means of the double bladed paddle. The ship was soon reached, and we recognized two of our friends of yesterday, and hoisted them and their kayaks on board; one of the latter was leaky, and the wily Esquimaux immediately set about to discover the cause. Everything was

taken out of it, and I had an opportunity of seeing how well they were stocked, including spare materials to repair any disaster that boat or implements might sustain. Several others soon came on board and walked about the ship in mute astonishment, at what they saw. One of them fearlessly went up the rigging on being desired to do so, as high as the main-top, and would have gone up to the truck, but was prudently called down, lest an accident might occur.

They told us there had been great excitement amongst them the previous night in expectation of our visit; that they had been busily engaged in using the cooking utensils we had given them, in preparing large quantities of fish, venison, and whale blubber in anticipation of a great feast in our honour, and still appeared anxious to regale us with these delicacies. The interesting-looking fellow who captured the Whale was one of the party on board, and his good-humoured smiling face and vivacity of manner made him a favourite amongst the men. He was taken below, and, from their united contributions, was speedily converted into a *thorough tar*. Apparently much delighted at the change he had undergone, he discarded his skin clothing, and put it away in his kayak. It was amusing to see him walking the deck in great dignity, with his hands in his pockets, and a good sailor-like gait. He did not appear so imposing as in his own costume: his size and stature suffering by

the change ; but he was very proud of it, and took every opportunity of exhibiting himself to his admiring countrymen. He went on shore as a sailor, and doubtless proved a formidable rival to the corporal of marines created the day previous.

It was ludicrous to observe the others, on beholding our friend so largely the recipient of our bounty, become suddenly affected, an aguish tendency having apparently set in, which, in the first instance, had the appearance of reality, as they walked about the deck, trembling in every limb, and drawing their skin garments at the same time closely around them. Our sympathy was excited by one who had a more miserable appearance than the others. He was taken below, and received a large warm flannel shirt, which he put on under his coat. He no sooner came on deck, than he stealthily took it off, concealed it in his kayak, and commenced shivering as before, but to no purpose. The trickery was discovered by an old quarter-master, who expressed his indignation in no measured terms ; and the aguish paroxysm, meeting with no farther sympathy, soon disappeared. Several had succeeded in this way in getting articles of clothing, before the deception was discovered. I was led by curiosity to place my hand on their skin, which I found to be of a high temperature. An oomiak, containing five women and four men, whom we recognised, came alongside in the course of the day from a fishing excursion. I observed the women

occupied the centre seats to paddle, the men at either end to direct the steering ; but all the labour devolved on the poor women.

I took their sailor countryman to the gangway, when they raised a wild yell, doubtless of surprise, on seeing him. They put on their best dresses in the boat, and came on board in holiday costume. I remarked before it more closely resembles that worn by the Indian women rather than the Esquimaux. The hood is high and imposing in appearance, ornamented with feathers, and profusely decorated with beads in front. It adds wonderfully to the apparent stature of these women, and produces a generally good effect. The owner of the leaky kayak, as soon as his countrywomen came on board, seized one of them and pointed out to her the hole in it. She immediately procured a needle from him, and thread of reindeer tendon ; and, with great quickness and cheerfulness, set about the repair, which she quickly accomplished. I naturally assumed she was his wife ; but such was not the case, as I found on inquiring. This incident tends to show with what readiness they work for and oblige each other—numerous instances of which came within my observation. They roamed freely about the ship, were noisy and clamorous for everything they saw, and were particularly charmed with the sight of a looking-glass which they could not at all understand : we gave them a few small ones, and several other presents. They were very anxious to see the women of our

tribe, and wished to know where we kept them. Some one pointed to the officers cabins, and said they were in those little houses—giving an idea of their domicile by showing the interior of one; and in this belief they left the ship. They gave us an illustration of one of their heathen dances to the music of their own voices, which was grotesque, but otherwise uninteresting. The men displayed great agility in leaping over bars on the upper deck, at a much greater elevation than our men could attempt; but in lifting weights, they were far surpassed by the latter, as they would have been in any other feat of strength.

We again sought for information from them respecting any parties that had visited the coast, when they repeated truthfully all we had previously heard of Sir John Richardson's party. On my making inquiry as to the appearance of the Chief of the party, they described him most accurately; and the captor of the Whale, who was merely an attentive listener of the conversation, at once imitated the firm upright gait of my friend Sir John, by walking along the deck; leaving but little doubt of his being readily recognised by these people should he again visit their shores. Observing that we took a great interest in all that related to the visits of travellers along the coast, after we had presented one of the party with a harpoon, and instructed him in its use, they told us for the first time, of a party with *three*

boats having visited them last summer, from whom they obtained knives and a few buttons in barter. One of the former they showed us. It was marked on the blade with a Maltese cross and the letter L. They could not give a satisfactory account as to their numbers, but that they had gone eastward. We scarcely knew what amount of importance to attach to this story. Whether it was related by these cunning people with the hope of gain, or that any other exploring party had passed along this coast, we were at the time ignorant; but I think it must have been the party of Sir John Richardson—assuming that the Esquimaux were in error as regards the period, it having been two summers since that expedition visited the coast. They said also that one of the former parties had told them that a great oomiak would come along the coast, and give each of them a gun. Now it so happened, they had observed the ship's muskets piled together in the armoury—it having been casually left open, and, being in an exposed part of the ship, could not escape their observation—and nothing could convince them that these were not the long-expected guns; that we were for the great oomiak they had heard of, there could exist no doubt—a belief on their part which gave us much trouble; and we had some difficulty in getting them out of the ship. We pacified them a little by saying, if we should come again and hear of the safe arrival of our letters, we would give a gun to each man who had

caught a Whale. An agreement of this kind is by them generally considered satisfactory. But we were not destined to retrace our steps along the American coast; our promise consequently remains, and is likely to remain, unfulfilled.

About 4 P.M. the weather became foggy. They took their departure, but it was only by hoisting out their kayaks that they could be forced to enter them; appearing by no means tired of our company. They then proceeded towards the islands with extraordinary speed.

The Esquimaux call themselves "Innuït," which signifies "man;" but the name by which they are now known is not considered to belong to their language, which along the entire line of coast we visited as far eastward as Cape Bathurst, did not differ very materially from that of the natives of Labrador and the extreme parts of the American continent, more than what might pertain to an ordinary degree of provincialism in other countries. Our interpreter, however, informed me that he had less difficulty in understanding the Cape Bathurst Esquimaux than those more to the westward, from its greater similarity to the Labrador language, with which he was thoroughly conversant. In appearance they certainly favour the Mongolian race. They are met with in the north-eastern extreme of Asia, the Aleutian Islands, along the entire coast of America, and as far eastward as Greenland, to the

south, as Hudson's Bay, and to the north as far as has yet been explored. They entertain a very exalted idea of their own importance, and consider themselves much superior to the Kabloonas, or white men. They were always very anxious to know if we were married, a question which the interpreter considered necessary to answer in the affirmative, as they entertain a great contempt for men who are not in that happy state, whom they consider boys; and a man's greatness is ever proportionate to the number of his wives. At our last interview many of them had brought down pieces of whale blubber for barter; but failing in that speculation, they devoured it ravenously—affording disgusting evidence of the great capacity of their mouths, which they quite filled with the blubber, cutting off with a knife what remained outside.

The physical characteristics of the Esquimaux, I have already mentioned; and the race we saw afforded ample evidence of their being possessed of superior strength. They are generally well proportioned, with full, capacious chests and well-shaped limbs. From several measurements which I made, the average height was 5 feet 4½ inches; but those apparently of Indian origin were taller, from 5 feet 7 to 8 inches, and in one or two instances even more. Their expression is by no means unintelligent. The complexion is swarthy, chiefly, I think, from exposure and the accumulation of dirt; the head is of good size, rather flat superiorly, but very fully developed posteriorly, evidencing a pre-

ponderance of the animal passions ; the forehead was, for the most part, low and receding ; in a few it was somewhat vertical, but narrow. The full-expanded nostril, broad face and high cheek-bones, were well marked ; they possess also keen, restless, small black eyes—the external commissure drooped somewhat. There is generally an absence of beard and whiskers, or they are represented by a few hairs ; in the old the growth is more luxuriant. The cavity of the mouth is one of the most capacious I have seen, with a regularly shaped, powerfully-formed lower jaw, and large, well-formed teeth—the incisors presenting a peculiarly flattened crown, as if worn down by attrition from frequent mastication of hard substances. The hands and feet are generally small and well formed. They live in a heathenish state, but appear to have an idea of the existence of a Being superior to themselves, whose favour they wish to propitiate to ensure success in the chase, or other expeditions. This is represented by a small ivory fetish, with the figure of some animal rudely carved on it, which they sedulously carry about their person, but will part with for a suitable price.

In the Esquimaux, westward of the Mackenzie River, we observed the lower lip perforated in the males, for the admission of labrets or lip ornaments, which detracts much from the general expression ; and when removed, the holes beneath either angle of the mouth, each about half an inch in

diameter, imparts an exceedingly disgusting appearance to the face. These labrets are generally formed from different kinds of stone or ivory, such as granite, gneiss, green-stone, lignite, &c., and are, in length, about three-fourths of an inch, with flat or oval crowns at either end, connected by a stock, and fashioned after the manner of a dumb bell. They appear to be entirely worn for the sake of ornament; but I did not observe them in the women, or in those tribes eastward of the Mackenzie. The lip is perforated for the labret as the boy approaches manhood, and is considered an important era in his life. The septum of the nose was perforated, in many met with along the entire coast, by a small piece of ivory about three inches long, tipped at either extremity with a bead. They do not appear to attach importance to any of these ornaments, as they will readily barter them, or any other article of clothing or equipment, for what desire may prompt them to possess.

Their clothing is almost universally composed of deer-skin, the fur inwards. The lower garments are sometimes continuous over the feet and legs; but more generally, the boots are separate, with a coat or jerkin covering the body, ending behind in a peak. A hood is attached to the coat, which is the only head-covering they use. The dress of the women is made sufficiently capacious to allow of their carrying their young children (for whom they appear to entertain much affection) either in the hood, or in contact with

their skin, and they manage to do it very adroitly—many amusing instances of which we were witnesses of.

Polygamy exists among them, when the women are sufficiently numerous; the number of the wives depending on the wealth of the husband, and his ability to maintain them. They appear to be bound by stronger bonds of affection than is usually observed amongst savage nations; but their standard of morality is evidently low; and a husband will readily traffic with the virtue of a wife for purposes of gain. Repeated instances of this were evinced in our intercourse; and no feeling of jealousy appears to exist amongst them. The women are, to all intents and purposes, the slaves of the men, and do the greater part of the out-door work, except hunting and fishing; they, however, enjoy a higher position, and more consideration than is usual amongst savages. The women manifest affection for their children; but the father appears to be stoically indifferent. They are not a prolific race from all I could learn; and male children are ever more welcome than females. Both sexes are tattooed, chiefly on the chin, angles of the mouth, and across the face over the cheek bones. The operation is had recourse to as they approach the period of puberty; and successive lines are subsequently added in the male, according to his prowess, or success in war or the chase. They have no idea of numbers, more than what is represented by the fingers; nor can they express their ideas of time in any other

way than by the indications afforded by moon and sun, which are vague and unsatisfactory.

They are keen and expert hunters, and afford ample evidence in their appearance, look and movements, of being possessed of all the essentials to ensure success in the chase; and when so much depends on the result of their exertions—nothing short of their existence as a race amid the dreary wilds of their abode—it may readily be imagined how keenly the perceptive faculties are exercised, when such powerful incentives are ever present to prompt them to exertion. In regions where nature is so sparing of her gifts, with the exception of the animals which frequent it, I need not speak of the enduring patience, hardships and privations, which this enterprising hardy race are compelled to undergo, along the inhospitable, snow-clad coast, of the Polar Sea.

They are as far as we could judge, courageous and active—Sir J. Richardson says, “more so than any known tribes of Indians with which he is acquainted”^{*}—industrious and provident, sly and cunning, and much given to pilfering and cheating, when engaged in barter. Numerous instances of their being possessed of both propensities occurred on board, where their cupidity became much excited by what they saw, and where there existed no moral, controlling power to restrain them. They are much addicted to falsehood,

^{*} “*Boat Voyage through Rapert’s Land.*”

and seldom tell truth, if there be anything to gain by departing from it ; indeed, amongst some tribes lying is said to constitute a virtue. Almost everything they saw, they made an attempt to steal—chiefly articles of iron from the ship—and when detected, they manifested no sign of shame or remorse. I was unable to ascertain with any degree of accuracy, what were the prevailing diseases among them ; cutaneous diseases and chest affections appear the principal, as may be inferred from their filthy habits, and rigorous climate. I saw several old people afflicted with chronic bronchitis, and asthma, and one or two had wens on the head and neck. Scurvy occurs with more or less severity, I believe, every spring ; and as an antiscorbutic they eat the sorrel, grasses and mosses ; and the contents of the stomach of the reindeer is considered by them a highly efficacious agent. They all appear to suffer more or less from ophthalmia—in the old people it is very common, with eversion of the eyelids. Several appear to have lost their vision from opacity of cornea, the result of frequent attacks, produced by the combined influence of snow and sunshine. I saw none labouring under any form of congenital disease or deformity, and from what we could learn, there is seldom any mortality except amongst the old people and very young children ; resulting in the latter, I should say, from the effects of exposure. When famine exists or accidents occur, of course the case is

different. Their ingenuity in constructing implements of war and the chase, in preparing skins, so as to render them waterproof, in the building of huts, and that triumph of architectural skill the snow house; the perseverance and tenacity no less than the success with which they follow the chase; their powers of patience, and endurance of cold and hunger, are unequalled by any other race on the face of the globe.*

I trust the day is not far distant when the light of civilization will dawn on this poor, benighted, but intelligent race of beings; for it is deplorable to think that there exists in the Queen's dominions people so utterly neglected as they have been, without an effort having ever been made by the rulers of their land (Hudson's Bay Company) to ameliorate their condition, or remove them from a state of heathen darkness. But where monopoly exists, progress is arrested; and it is to be hoped the wisdom of our legislature will, ere long, destroy the one and promote the other, and thus develope the resources of their country to the permanent advancement and happiness of its inhabitants. The laudable example shown by the Moravian brethren on the dreary coast of Labrador, and the good results which have

* For full and interesting details concerning these extraordinary people, I beg to refer the reader to the admirable and interesting narrative of Sir John Richardson, in his "Boat Voyage through Rupert's Land."

attended their meritorious labours in the work of civilization, is worthy of our imitation, and will, I trust, be followed.

The facility attending the opening of steam communication, by means of vessels of light draught of water, along the coast of America during the summer months, has been fully established by the results of our voyage; presenting a fair field for the commercial spirit and enterprize of our country, and every prospect of remunerative advantage.*

* Since the above remarks were sent to press, I am happy to say, that this subject has been brought under the notice of the House of Commons by the Secretary of State for the Colonies (Right Hon. H. Labouchere), and a select committee have been appointed to inquire into the same, as well as into the expediency of renewing the Charter to the Hudson's Bay Company; its validity having been questioned from the non-fulfilment of the conditions on which it was originally granted.

CHAPTER VIII.

Departure from Cape Bathurst—Aurora Borealis—Ice—Currents—Franklin Bay—Rain—River Horton—Aspect of Land—A Bear—Refraction—Strange Appearances on Shore—Report of the Ice Mate—The Ice—A Boat despatched to the Shore—Whales and Seals—Cause of strange Appearances—Volcanic Mounds—Weather—Difficulties—Character of Coast—Incident on Board—The Evening—Ship Beset—Cape Parry—Land discovered to the N.E.—Opinions—Position at Evening—Sunset—Aspect at Morning—Possession of Land—Name bestowed—Its Character and Incidents—Appearance of Headland and Coast—Birds seen—Progress—Incidents—Shape a Course to North-East—Weather—Difficulties—Sight of Land—Hopes and Conjectures—Currents—Temperature, &c.—Discovery of Prince Albert's Land—Discovery of Islands—Appearance of Sea—Position—Weather—Ship Beset—Gloomy Evening—Occupation—Change of Prospects—Attempt to force a Passage and Failure—Position—Amusements—Altered Aspect of Ice—Secure to Ground Ice—Sudden Departure—Difficulties—Birds.

WE stood off the land until the impenetrable pack was again encountered, and as there was no water to be seen to the north, we kept along its edge

to the E.S.E., through heavy loose ice. We had long hoped our efforts from this prominent point of coast would be successful, only to be again disappointed by the same obstacles; but as we were approaching that meridian in which land had been seen thirty years before, some three hundred miles to the northward, we never relinquished the idea that a better fortune was in store for us.

The Aurora Borealis was faintly seen for the first time on the night of the 1st September, but was much obscured by the dense haze which prevailed—it extended from N.E. to S.W. The force of a current setting N. 14° W. from 20 to 25 miles a day, nearly antagonized the power of the wind, and it was not until the 3rd, that we got to the Eastward of Cape Bathurst, and entered Franklin Bay, having been off the former for the previous three days. On the 2nd, we saw two White Whales, (*Beluga Borealis*) and a Narwhal (*Monodon Monoceros*) going to the westward. The trending of the pack edge brought us into a fine capacious bay, the limits of which we could not discern, bearing the honoured name of Franklin. Large flocs which had drifted off from the land were met with at its entrance; they assumed a much bolder and more elevated character; and the water had become much deeper, the soundings varying from 63 to 115 fathoms. Heavy rain fell on the night of the 3rd and morning of the 4th, which was followed by a rise of tem-

perature from 32° to 45°, and the weather became much more agreeable than it had lately been, the wind at the same time gradually veered round to the west. On the afternoon of the 4th, we were off the entrance of the river Horton, where the water as usual became more discoloured and lower in density. As we approached it, several shoals were passed over in ten and thirteen fathoms of water—doubtless caused by the accumulation of alluvial deposit. The land on either side of this river, gradually rises to an elevation of nearly 200 feet, with numerous small mounds and ridges scattered on its surface, which on casual observation much resembled huts. Smoke was observed some distance along the coast to the southward, which was anxiously watched, for any sign that could indicate the presence of human beings, apparently it proceeded from an ordinary fire. As evening closed in, we had not reached sufficiently near to satisfy our curiosity on this point.

A large White Bear was discovered swimming towards a piece of ice, but too distant for pursuit; several Whales and Seals were also seen, and numerous flocks of Ducks in the course of the day—the latter going southward. The refractive powers of the atmosphere appeared to wonderful advantage at various periods of the day; the loose floating ice, presenting a beautiful columnar structure, which became so closely identified with the land, that an unpractised eye would fail to discover the latter; the

glassy smoothness of the water, and the larger masses of ice interposed over its surface, contributed much to the beautiful effect produced.

Rain fell heavily on the morning of the 5th, but towards noon the weather became calm and clear. Smoke was again observed rising vortically against the dark back ground of the land, which appeared about 250 feet high. Its continuance had much increased the interest we had felt on first observing it, as it was not unreasonable to suppose, a fire might have been kindled by people who possessed no other means of attracting observation. We considered it very improbable that the Esquimaux would have kept up a fire for so long a period, and as they are never without boats, that they would have attempted to communicate before this. We could only arrive at one of two conclusions—either that it was a fire kindled by strangers, or that it proceeded from some igneous agency in the soil; the former opinion however prevailed, as the ice master reported from the mast-head that he saw the flame of the fire, huts on the shore, and people moving about in light coloured clothes.

Lieutenant Cresswell and myself were despatched in the second whaleboat to ascertain the truth of this report. The spot being distant about ten miles from the ship, we had a long pull, in the course of which we met with a great number of Whales—at one period we counted no less than fifteen above water,

several of which came quite close to us, and might with facility have been harpooned. Seals were also numerous; they were moving about quite sluggishly, apparently free from care or strife, and equally ignorant of the harpoon of the Esquimaux. When we approached the shore, there remained no doubt as to the entire absence of a fire, and the other creations of the ice-master's imagination; the smoke being entirely the result of chemical action in the soil—slender columns of it emanating from small mounds, were borne along the precipitous coast by a light westerly breeze. The boat grounded some distance from the beach; and, on stepping out, I sunk deeply into soft clay. I found that a land-slip had evidently taken place. The soil was of bituminous shale; clay and loam, of a red, black, and yellow colour were singularly blended together. Dense columns of smoke issued from miniature volcanic mounds; not from any well-defined crater, but from their top, into which a pole could be thrust, as if into a cavity—so little adherent were its particles—and large masses of lime and sulphur, variously combined with other elements of the soil, including alum and silenite, were then dug out in a burning state. Their surface appeared as if in a state of fermentation, from the light spongy nature of the soil, and so hot that we could not stand on it many minutes. These mounds formed quite a little amphitheatre, inclining from the sea at an angle of 45° , and elevated in height from ten to thirty feet. Several of them were stra-

tified with black and yellow alternately—clay and sulphur; and others had quite a laminated appearance, stood entirely detached, and were chiefly composed of dark, rich loam. In the intervening space between them, I observed numerous bright yellow lines, formed on the black surface, not more than half an inch deep; being sulphur deposited from the line of smoke, strongly impregnated the atmosphere. There were several small rills of running water, elevated in temperature, in various states of combination, with the substances mentioned, into which sulphuric acid entered largely, from its taste and action on cloth, and other substances with which it came in contact. The general appearance of this part of the coast conveyed to my mind an idea of similar chemical agency having previously existed on the bed of the ocean, prior to which, the sedimentary deposit from the superincumbent water may have filled up the interstices of the cones, so as to impart that line of evenness and uniformity it now presents. A distinct line of demarcation ran horizontally along the coast, as far as we could observe, dividing it into two equal portions; the lower half presenting a vertical surface to the sea, as if a section had abruptly fallen off from want of sufficient cohesion to maintain its primitive form; and displaying to the eye the same variegated and stratified appearance of black, red, and yellow, I had observed existing in the small

mounds from recent action. The upper half partook more or less irregularly of what the upper half of a cone might be supposed to represent; receding from the lower at an angle about 20° , with the beds of water-courses, or rather small cascades intervening; and altering in some places its conical character; which, during the season of thaw would doubtless present a very picturesque appearance. This was the most eastern and last point of the continent of America we had an opportunity of visiting. After nearly an hour's examination of the locality, we took our departure for the ship—that had stood in towards the shore to meet us—which we reached, escorted, as before, by numerous Whales and Seals, whose gambols in the water much enlivened our cruise.

During our absence, a volcano of some activity had been discovered in the main hold, caused by an accident in the apparatus connected with Sylvester's stove; but it was extinguished without much damage or destruction of stores. As evening closed in, the wind freshened considerably from the west, and subsequently south-west. The night was dark and dreary, and sailing through loose ice, we came into heavy collision with it frequently. There was every evidence, from the heaving of the ship, of there being a good expanse of open water to the northward, and the wind being off shore, we expected to see the ice driven well off on clearing the bay the following morning.

Having made good progress during the night, at

4 A.M. on the morning of the 6th, Cape Parry was observed; and as no impediment lay in our course, N. 55° E., it was soon rounded—having passed a small island off it in twenty-two fathoms water. The Cape, viewed at a distance, appeared bold and lofty, between four and five hundred feet high, and gradually identifying itself with the lower land stretching away to the south-east. The strong south-westerly wind, as we predicted, had set the ice off the coast, and although still in an ice-encumbered sea, there was a large expanse of intervening water which enabled us steadily to continue our advance, as all eyes were anxiously turned to the north.

At 11.30 A.M., the joyful report of "land on the port bow" was proclaimed from the mast-head; and as noon dispelled the haze which hung around its lofty outline, and revealed it to our delighted eyes, it bore from N.E. to E.N.E. distant about thirty miles. I need not attempt to describe the feeling of joy which this pleasing intelligence diffused amongst us; of the hopes indulged in, or the variety of opinions entertained and freely expressed. All eyes were directed towards it for the remainder of the day, anxiously looking forward to our soon reaching this newly discovered territory. Some thought it would prove to be a continuation of Wollaston Land, others that of Banks' Land as we had then nearly reached its meridian; but whichever it might prove to be, the interest was absorbed by the feeling of confidence

universally entertained that the land before us would prove a certain guide to lead us to the northward—perhaps to Melville Island.

The wind gradually fell light towards evening, and we continued working through loose ice until we had reached within ten miles of our discovery; which appeared still bolder and more imposing in its outline. As if to add to the cheerful feeling we experienced, the sunset was peculiarly beautiful, tinting the western horizon with colours no effort of art could pourtray—the most brilliant scarlet and crimson, stratified on a rich neutral ground, formed by a harmonious blending of all the elementary colours of the rainbow, a picture of pure Arctic scenery, stillness and beauty, which cast an auspicious halo around this new land.

Having advanced slowly during the night, at 8 A.M. we had reached within two miles of the magnificent headland we had just seen, and could obtain no soundings at 120 fathoms. Preparations were at once made for landing, and taking formal possession of it in Her Majesty's name. Accordingly at 9.40, Captain M'Clure and myself left the ship in the third whale boat, followed by Lieutenant Cresswell, and as many of the officers as could be spared, in the first cutter. The morning was cold, but with a fine clear atmosphere, and a fresh breeze from the north-east, with joyful hearts we pulled towards the shore. As we approached, we found the ice still packed on

the shore, that obliged us to get out and haul the boat over the floes into clear water, which led us on to a fine pebbly beach, eastward of the Cape, extending out for some distance, and it could be distinctly seen to be of great depth from its perfect transparency.

On landing we unfurled a red ensign, and planting the flagstaff in the soil, took formal possession in the name of our Most Gracious Sovereign, with three hearty cheers, and one cheer more; bestowing on our discovery the name of "Baring," after the First Lord of the Admiralty, under whose auspices the expedition had been fitted out. A scroll, containing the ship's name, and those of the officers, &c., was placed in a bottle, and carefully secured in a cask fixed in the soil, with a pole about fifteen feet high attached, to attract the attention of any subsequent visitors to Baring Land.

Although it subsequently proved to be continuous with Banks' Land, a portion of whose northern outline was seen by the late Sir Edward Parry (that distinguished pioneer of Arctic discovery) from Melville island, thirty years previous, he had never landed on it, and as we were entirely ignorant of its continuity at the time, there could exist no possibility of a doubt, of our right to take possession of, and name it, as we did.

We at once proceeded to make a hasty exploration of the land, and meeting with a rivulet on our way,

paused to drink the Queen's health, with a blessing, in something stronger than the limpid element, that formed a part of the beverage. I detached myself, with an attendant, to procure whatever specimens of Natural History the land afforded: its surface presenting quite a different character to that we had lately visited on the main. Instead of a rich, luxuriant peat soil, sterility and barrenness met the view; sand, shingle, and broken stones, with patches of verdure interspersed here and there, ornamented with a few pretty little saxifraginous and other plants, formed the oases of a scene, they pleasingly relieved and enlivened. As we had landed on the broken land eastward of the Cape, the ascent was rendered extremely difficult from the mass of *débris* and large rugged stones strewn over its surface. I had, however, nearly attained its summit, when I was reluctantly obliged to forego any further ascent, it having been determined to return to the ship, then working along the shore; and as we knew not how soon we might be compelled to seek refuge here, it was ever an object of solicitude to seek for traces of animal life, of which in this short excursion we found abundant evidence. Tracks of Musk-Oxen, Reindeer, Bears, and Foxes were observed, with portions of the horns and antlers of the two mer, forand the skull of a Bear; a few Hares were the only living animals seen. Stones and pebbles of every variety of granite, and other volcanic

and aqueous products, were strewn along the beach ; but the geological character of the land was of limestone formation, evident from the different specimens I procured.

The men were equally busy in their explorations, and were delighted with the short run they had had on land, which they familiarly called *their own*.

The appearance of this coast, when viewed from the sea, standing on a north-east course from Cape Parry, is bold and lofty ; it gradually falls away on either side from its southern extreme, or angle, in lat. $71^{\circ} 5' N.$, long. $123^{\circ} W.$, extends in one direction to the north-west, and in the other to the east-south-east. The headland itself we estimated at 850 feet in height, but the summit of higher land could be seen in the interior, not less than 1000 feet ; this presented a strikingly grand and imposing appearance, and to it the name of "Nelson" was given, in remembrance of a hero, not hitherto honoured by Arctic discoverers in the bestowal of their favours. The altitude gradually decreased on either side, until it ended in a low beach, some eighteen or twenty miles to the eastward, and then rose again in an undulating background, forming a continuous amphitheatre of ill-defined hills, so close to each other as to establish an apparent continuity of surface, but which are really separated by tortuous valleys and ravines. "Nelson's Head," therefore, as it is called, presents a bold, precipitous front, rising

almost vertically from the water's edge. It is of limestone formation, the lower third of dark brown stratification, above which it assumed a lighter colour of reddish yellow, such as a ferruginous coating might impart. This was surmounted by a dark grey columnar formation, much resembling irregularly-formed basaltic columns, with joints or fissures similar to what is usually observed in that formation; the whole capped by a covering of soil. The line of stratification dipped about 10° or 15° in an E.S.E. direction, and became lost as the land decreased in elevation. This dip was remarkable, and a prominent feature in the formation, but was less evident and more horizontal to the eastward, until finally lost in the dunes or low hills I have mentioned, where an abortive attempt at the same formation could be traced for some distance along the coast. A large quantity of *débris* had collected at its base.

As we only landed on the beach, and as time did not permit us to reach the cliffs, I am unable to say whether fossils are or are not to be found here; but, from the analogy subsequently afforded elsewhere on the island, I am inclined to speak in the affirmative. On the beach, granitic, quartzose, micaceous, clay-slate, and other varieties of water-worn pebbles were in abundance.

The appearance this bold headland presented while approaching the shore in the boat, and when viewed in

profile, was exceedingly fine ; indeed I may state that its sublimity and grandeur, was only equalled by its picturesque beauty—producing an effect, I have seldom seen surpassed, and recalling forcibly to mind, but on a scale of greater magnitude, the finest of our old gothic structures and castellated mansions according as its position varied with our progress ; but viewed from whatever point, it presented a grand and imposing aspect.

Having returned to the ship, we continued for the remainder of the day working along the land, the outline of which became more irregular as its elevation decreased, forming shallow indentations, or bays of limited extent ; the background rising gradually to a height of 300 or 400 feet. It presented a brown, arid appearance, from the scantiness of its vegetation, but which I have no doubt is sufficiently abundant for its herbivorous inhabitants.

We saw several flocks of Brent and Snow Geese, the Fulmar Petrel, a flock of Ducks and a few Snow Buntings, in the course of the day ; but failed to procure a single specimen. Our skill was evidently exceeded by our eagerness. As evening advanced, our prospects assumed a still more cheering aspect—a vast expanse of water lay before us to the eastward—scarcely a particle of ice was anywhere to be seen.

The following morning (Sunday 8th), we still advanced, working against a strong wind along our newly discovered coast. The usual Sunday routine

was gone through by mustering at divisions, and performing Divine Service; and truly thankful did we feel to the Giver of all good for the abundance of His mercies in guiding us thus far so providentially on our course, amidst the dangers and difficulties which had everywhere surrounded us. The weather continued clear and fine; a flying mist occasionally present, did not obscure our view of the land, close to which, in water varying from ten to seventy-six fathoms, we continued our advance. Its aspect did not differ materially from what I have before noticed; merely presenting a less elevated and more open character, as numerous large inclined plains were from time to time exposed to view. The soundings obtained were evidently identical with the character of the land, which was no doubt, at a remote period, upheaved from the bed of the ocean from the effect of Plutonic agency.

We had anxiously watched the bending of the coast the entire day; and as each successive point was rounded, ever hoped to see it turning off in a northerly or north-east direction, as we kept as close to the shore as circumstances would allow. It was not, however, until 8 P.M., as darkness was setting in, that we found we had, at length, rounded its eastern extreme; then following its outline, we altered course to north-east, and brought the land on our portbow, which converted the previous adverse wind into a fair one, by keeping the ship away a few points.

On the morning of the 9th, the weather underwent a marked change. The wind shifted round to the south-east; it became dense and foggy, at times obscuring the land from our view, along which we still continued to run on a north-east course with the aid of a light breeze. The water was smooth, nearly free from ice—a few loose pieces only being occasionally met with. Towards noon, the fog having partially cleared away, land was observed to the eastward on our starboard beam, running parallel to that along which we were advancing, distant about eight or ten miles. It was of the same appearance and character, and, as far as we were able to see, was running likewise in a north-easterly direction. Unfortunately, however, the fog soon again obscured it from view—the transient one we had obtained only added to our previous anxiety. It appeared to have dispersed only to afford us a momentary glance at this addition to our territorial accessions, and discover another land to vie with that of Baring, on which our eyes still fondly rested. With the exception of an occasional faint glimpse of its outline, it was not seen for the remainder of the day, and the fog hung heavily over both lands; still we continued to advance with all sail set, not knowing when our progress might be arrested. Many and various were the conjectures formed, and opinions expressed, as to what the land would prove to be, or where the water in which we sailed would lead. We continued in a

state of painful doubt and uncertainty—our minds agitated by successive feelings of hope and joy, but despair *never*—as to what a clear state of the atmosphere might reveal. Unfortunately, our surprise was not removed for the remainder of the day, as the fog became more dense than before, and we continued still groping our way through an unknown sea. A few pieces of floating ice were occasionally met with, one of which, for a short time retarded our progress. The water was deep from 35 to 75 fathoms, and from 29 to 31° in temperature, with a density of 1022. A current was found setting to the westward at the rate of 10 miles in 24 hours; the temperature of air was from 33° to 36°, cold and raw, and the variation of the compass was found to be 26° easterly.

Early on the morning of the 10th, the joyful intelligence of land on either quarter was reported as day advanced, and the fog cleared away, it could be seen running in a parallel direction on either side as far as the eye could reach; and the hope so ardently entertained, that this fine sheet of water might prove a Strait was likely to be realized, as we uninterruptedly pursued our way to the northward. Still the same anxious feelings pervaded our minds; and one almost felt afraid to give expression to one's hopes; lest the reports from the mast-head, frequently as they came, might destroy them.

At 8 A.M., when running in mid-channel, the land

on either side, distant some six or seven miles, an island was observed bearing N.N.E., about ten miles distant.

So smooth and tranquil was the surface of the waters—merely rippled by a curl to indicate the presence of the light breeze which bore us steadily onward—that we were forcibly reminded of the lakes in some of the wild and picturesque localities of our native land; varied, here however, by a line of stupendous ice, stretching far away along either shore. Towards noon we were abreast of the island, and instead of there being only one as we first supposed, there were two—the smaller and more northerly being in the same line, was concealed by the larger, from which it was distant about half a mile.

We had made such wonderfully good progress throughout the earlier part of the day, that at noon we were only sixty miles distant from the known northern limit of Banks' Land, to lead us into Barrow's Strait, and consequently to the discovery of a Passage. Our hopes then, indeed ran high; but only soon to ebb, equally low. At 3 p.m. instead of the bright and cheering aspect we had enjoyed for some days, the wind suddenly changed into the N.N.E. directly adverse to our further progress, and set the ice, not previously in sight, down towards us. Where clear water existed but a short time before, was now an icy sea. We continued to tack for the remainder of the day as was requisite, whenever the presence of

narrow lanes of water enabled us to steer the ship; but were often temporarily beset, as the ice closed from time to time around us. The change of wind had brought with it a marked diminution of temperature, with snow and fog: thus evening closed around us, as wild, gloomy and cheerless as it is possible to conceive; and in that quarter to which our eyes had been so constantly directed, where all our hopes were concentrated, nothing could be discerned but an impenetrable icy barrier. But, our hopes were not destroyed—we knew how a short period might alter even this dismal aspect of affairs: and our position was, at least, attended with one good effect—it enabled us to arrive at the conclusion, then more probable than ever, that the sheet of water in which we floated was a Strait: from the fact that the ice had suddenly come down on us from the north-east, the gradual divergence of the lands, then about twelve miles distant from each other, and the increase in the depth of water, soundings having been obtained from 70 to 80 fathoms. Under these circumstances there was great ground for hope, and we hoped for the best.

The ice which had been setting down toward us during the night, had early on the morning of the 11th, seized us in its grasp, and the ship became beset. By filling and backing the sails, in a few hours, we forced her through the barrier into a small space of open water, which enabled us, by tacking,

almost incessantly, to work through narrow intervening channels.

Thus we laboured, endeavouring, at least, to maintain our position until noon, when we were again beset about two miles distant from the eastern shore (Prince Albert's Land), on which the loose ice was then being drifted; and to obviate our being borne with it, the ship was secured with ice-anchors to the nearest large piece of floe-ice in fifty fathoms water. The wind in the morning had changed to north-west, and towards evening became still more westerly—a change we hailed with gladness, in the hope that the ice might again be drifted in the direction from whence it came, and that, if we could not extricate ourselves, we might be drifted with it, amid its perils and dangers, to the northern extremity of the Strait (if it were one), into Barrow Strait. As the aspect of this icy element is ever varying, fortunately for us, it again opened out a little, and as we were being drifted with it on the shore, we were enabled to cast off from the floe, escape the threatened danger, and make sail through narrow channels of water, endeavouring to get to the northward; but our progress for the remainder of the day was inconsiderable, and night closed in again intensely cold, wild, and dreary—the wind freshening, snow falling, and the temperature of air at 20° . The state of the ice a-head afforded anything but a cheering prospect, as we knew not the moment our progress might be arrested,

and the ship, perhaps, immoveably fixed in its grasp for the winter.

There was but little change in the general gloomy aspect around us on the morning of the 12th. We continued to take advantage of every open space that could be reached, through the heavy-packed ice that kept setting down on us; and nothing but one uniform frozen field could be seen to the northward. Towards noon we found all further efforts to advance impossible; and the ice gradually closing, we became firmly beset. The ship was attached to a floe of great extent—its undulating, hummocky surface, purely white from the recent snow, with numerous frozen ponds interspersed throughout, presented a striking feature in the scene.

The evening wore an uncommonly bleak aspect, snow fell continuously, the sky was overcast and lowering, with frequent heavy squalls; in short all around was dull, gloomy, and dismal. We were in high spirits, notwithstanding, and amused ourselves in sliding and skating on the ponds—both being a novelty to many. Frequent and heavy were the falls, and no less loud and hearty the laugh which resounded over the dreary ice waste, in evidence of the pleasure we experienced. The rudder was unshipped in the forenoon—not that we expected to do without it, but that, in the event of our being subject to heavy pressure, it might be in a safe position.

On the 13th, we found that we had not hoped in vain for a change in the aspect of affairs—transient though this was, and slight in degree; yet, instead of that dreary wildness pertaining to snow-storms, we had a clear, dry atmosphere with a temperature of 15°. The ship had drifted a little to the southward, from our greater proximity to the islands; but as the sun shone forth towards noon, we had the extreme satisfaction of seeing the ice gradually relax its frigid grasp, and the wind from the westward slowly driving it towards the shore of Prince Albert's Land, left a space of water of sufficient extent to warp her towards the centre of the Strait. All hands (officers and men) then manned the capstan with cheerfulness and alacrity—the hawsers having been previously laid out with ice-anchors by a cutter and whale boat in the large floe to which we intended to go. This was reached in the course of an hour, thereby gaining nearly 300 yards, and we were only separated from another sheet of open water by a narrow isthmus of ice about 40 yards wide, but through which we could not possibly penetrate. The ship was consequently made fast to the floe, which apparently extended uninterruptedly to the shore, as any further efforts to advance then would have proved utterly abortive. The report from the mast-head being favourable, as to the existence of narrow channels of water to the northward, could we only reach them,

we hoped soon to take advantage of a more favourable disposition of the elements.

We amused ourselves on the ice as before. A solitary flock of Ducks were seen winding their way to the north-west; and several Gulls were hovering about, one of which, the Glaucous Gull (*Larus Glaucus*), fell a victim to his curiosity, having boldly approached within a few yards of the ship. The land on either side had assumed its winter garb, but the sun had still a slight counteracting influence as was evidenced by the few traces of its dark brown surface that were revealed by his presence. The temperature was daily decreasing, having fallen to 10°; there was, therefore, every indication of the advent of winter; but we still hoped that the outlet of our new strait would yet be reached.

On the morning of the 14th, the ice presented a more open appearance; and to force a passage through the opposing barrier all our energies were called into activity. Ice anchors were laid out on the floes ahead, and the capstan was again manned by all hands; but we advanced only by inches, now veering on one hawser, then hauling on another; and our efforts, after several hours toil, proved utterly futile. The saws were had recourse to; and, after working them for some time, we again found our labour had been expended in vain. We then experienced how perplexing was ice navigation. What a tax on the resources and energies of man; indeed, what perse-

verance was demanded to surmount the obstacles ever to be met with, those alone can judge who have been placed in positions similar to what ours had been for the previous few days.

As the wind from the north-west had gradually closed the few remaining small channels of water, young ice was rapidly forming; and we were again closely beset. The general aspect of affairs was then extremely unfavourable, the sky being cloudy and overcast, snow falling, with an icy cold blast which froze its flakes together as they fell on our beards and moustache, nearly gluing up the mouth and eyelids. The amusements afforded by sliding had an admirable effect on the minds of our crew; antagonizing as it did, that depressing influence which our position could not otherwise fail to produce, and rendered them cheerful and active when the time for exertion came. Few could have supposed that helpless, ice-bound mariners as we were, with our ship in a most critical position, we could have experienced so much enjoyment. In the course of a few hours the wind had gradually veered into the south-west, the ice was observed to open in various directions, and a line of water was seen running along the western shore. On the following morning, Sunday the 15th, the westerly wind which had driven the ice from the opposite shore, set it down on that on which we were beset; but the lanes of water in sight having become more numerous and larger, another effort was made

in the middle watch to reach some of them, in the hope that they might lead us into the wide expanse of the same element then formed on the western shore, where, the day before, there was not a vestige to be seen. All hands were again called to exertion, but failed to move the ship more than a few inches; and we were ultimately obliged to fall back on our original position, awaiting a more propitious state of things with the coming daylight.

As morning advanced, we had the satisfaction of seeing that the wind was from the south, with a higher temperature, while we were drifting northward with the heavy ice in which we were impacted; this gradually relaxing its grasp, at 9 A.M. we found ourselves in a small space of water, the ice around us disposed to break up, from the appearance of fissures throughout the floes, and narrow lanes of water just perceptible. That channel which it was then our object to reach, was distant about 200 yards, and could be seen to communicate with the open sea on the opposite side. By our united efforts, we expected to force the ship through the intervening field of ice; but, unless aided by the wind to break up the floe, this would be impossible. Indeed, the work appeared to be very much like an impracticability.

Ice anchors were first laid out, and hove on from the capstan, when we moved a little. Others were laid out in different places, so as to swing the ship in that direction where the ice appeared most open. We at

length attained a position which enabled us to make sail; and we went a-head a few yards, but shortly, were again beset. The ice anchors were once more had recourse to—occasionally astern that we might retrace our steps a little, or warp the ship where the ice appeared weak or loose, or turn the opposing floes out of our course. By these means, we advanced in a slow but progressive degree. Struggling on fearlessly, we reached a heavy floe piece, and, as the ship struck, remained for some time pressing against it. Some men being then sent on the neighbouring floe, were about to commence operations in another direction, when most unexpectedly this obstacle divided into numerous large fragments; and, in a few minutes, with a loud, grating noise, the 'Investigator' having forced her way through, was in clear water, making all sail for the western shore. Towards noon, we had got into a fine expanse of water; and, as we steered along the shore of Baring Land experienced a regular swell of the sea—evidencing open water far to the southward. As the ice would, doubtless, be drifted still further to the northward, we kept off its edge about half a mile, ready to take advantage of any opening that might present itself. We continued, therefore, tacking off and on until evening, when, observing a heavy floe piece about ten feet out of water grounded in five fathoms, and about one hundred yards from the shore, we stood in towards it, and made fast for the night on its northern side. We

could not but feel satisfied at the position our exertions had enabled us to attain, as we looked on the fine sheet of water that we had been so anxious, but a few short hours before to reach, and the distant pack on the opposite shore, from which we had so happily escaped. Our ship then lay resting against the floe, as if wearied with the conflict, and slumbering after the desperate but successful struggle of the morning. Our men, who had worked with the utmost zeal and activity throughout that trying day, had early retired to their hammocks, with every prospect of the southerly wind effecting much in our favour during the night, when about 9 P.M. the ice was observed in motion, rapidly approaching our position from the opposite shore; and the anticipated rest was suddenly disturbed by the call of duty. Our position was, by some, considered critical, as the immense body of ice setting down on us would, it was supposed, have afforded but small chance of escape, and, in all probability, might have set us on shore.

Others with the ice master, thought our position was rendered quite safe, from the protection afforded by the floe, and advised our remaining, rather than run the risk of being again beset—a view of the question in which I entirely concurred. It was, however, decided otherwise, and orders were given to cast off from the floe and make sail to the southward. The ice was then not more than one hundred yards from us, and formidable as its grim outline appeared in the

darkness, we found as it closed on us, it was nothing but fragments, which could not in any way have endangered our safety had we remained where we were. We were thus again in difficulties, and literally boring through loose, sludgy ice; whale lines were laid out for warping wherever they could be made available, and all the other usual means had recourse to; but it was not until midnight, after great labour, that we succeeded in reaching the open water. Early, however, on the following morning of the 16th, we were again closely beset, but in the course of a few hours, were enabled, by a repetition of the means before mentioned, to get into clear water again—warping and boring with canvas set, as the circumstances of our position demanded. We had, at the same time, the mortification to witness a lane of water, extending from the large piece of ice we had so hastily abandoned the previous evening, far in a north-east direction, and apparently beyond the termination of the land on the eastern side of the Strait; but to reach it then was impossible, as a couple of miles of ice intervened. It continued moving about in a most wonderful manner for the remainder of the day, in various detached floes and masses, requiring the utmost vigilance to prevent our being again beset.

Although we had for some time before noon, been standing to the southward, and had been beset and rendered utterly inactive so often, yet we had been

for the most part drifting slowly to the northward, our position at noon having been found by observation to be in lat. $73^{\circ} 6' N.$, long. $117^{\circ} 10' W.$ —we had, however, been some miles further to the north; a higher position than was ever subsequently attained in this Strait. We were thus only thirty-five miles distant from the northern limit of Banks' Land, and it was tantalizing to think, after a voyage of so many thousand miles, and having overcome so many of the perils of ice navigation, that this short distance could not be accomplished. The ship was hove to for the night, as it served no good purpose to keep under weigh, exhausting the strength of the men, when there was nothing whatever to be gained by it, and darkness and loose floating ice, rendered the navigation no less difficult than dangerous.

Several Ducks, Gulls and Seals were observed, five of the former were shot; they were ever welcome, as they conveyed the pleasing evidence that winter had not yet set in, although the appearance of the weather, and the steadily decreasing temperature, truly told us of its advent.

CHAPTER IX.

Young Ice—Its Formation—Our Position—Barrow's Strait—Opinions respecting the Existence of a Passage—Drifting in the Pack—Incidents and Dangers—Equinoctial Gales—Critical Position of the Ship—Increasing Dangers—Preparations to meet Casualties—Aspect of Ice—Pressure—Continuous Drifting—Arrangements for abandoning Ship—Assault of the Ice—Halsers and Life-buoy carried away—Abatement of the Gale—Change of Weather—Temperature—Position—Collisions—Approach Princess Royal Islands—Critical Position—Escape—Conclusions arrived at—Last Day of September—Preparations for Wintering—Parhelion and Parasellene—Birds—Early Days of October and Occupation—Ice in Motion—Heavy Pressure—Alteration in Appearance of Ice—Experiments with Gunpowder in Blasting—Aurora Borealis—Completion of Winter Preparations—Daily Routine and Exercise—Ice in Motion—Its Aspect—Reflections—Weather.

EARLY on the morning of the 17th of September, young ice having formed around us during the previous night, had, from the effects of the pressure of heavy flocs, and low temperature become so thickened, that our progress was arrested—the light

westerly breeze not being sufficient to propel us through it. Towards noon, however, we were released, when an effort was made to reach a small space of open water to the south-west; we advanced a little towards the attainment of our object after great exertions, much thwarted by the rapid formation of young ice, which soon entirely arrested our progress; and we secured the ship to the heaviest piece within reach.

The formation of young ice is always a serious obstacle to Arctic navigation. I observed that it first appears in the form of minute flocculi, which gradually become larger, more opaque and globular, then coalesce, but possess for some time their spherical outline, until pressure identifies them more closely with each other, when a thin film becomes formed on the surface of the water, imparting to it an oily appearance, to which the name of "Pancake ice" has been given. This becomes broken up by the slightest contact with heavier ice; and the fragments sliding under, or over each other, acquire greater thickness. From frequent repetition of the same process, and the continuance of low temperature, they soon acquire strength and thickness, become united with others, and form a frozen surface of greater or less extent, through which a ship cannot possibly penetrate, when thus surrounded. These floes undergo the same liability of being broken up, by the pressure of heavier masses, the fragments become thrown up, and

cemented to each other forming packed ice, which may go on increasing, together with the accumulation of snow, for periods of indefinite duration, and ultimately present that terrific, indeed impenetrable barrier to navigation so frequent in those seas. Wind is the great antagonistic agent to the formation of young ice; but when this is absent, and the temperature falls, it is surprising to see with what rapidity congelation takes place.

Our position had not materially altered. On the 18th we drifted a little to the north-east, and the morning being very clear, at an early hour the ice mate was sent aloft to report on the relative state of the ice and land—his field of vision embracing an extent of, at least, twenty miles. No land could be seen directly to the northward in the line of the Strait; but that on the western side bore away to the north-west, and that on the opposite side to the north-east. This was, indeed, very gratifying intelligence—the termination of the land being seen on either side, and none directly ahead, there could exist no doubt that Barrow's Strait lay before us.

We were, however, afraid to indulge too confidently in anticipations respecting the Passage. Some thought it possible, that the northern limit of Banks' Land might not have been accurately laid down, even by such an observer as its great discoverer (the late Sir Edward Parry) from the deceptive appearance which the atmosphere might then have presented, and under

circumstances when human judgment is so liable to err. Others, and myself amongst the number, strongly maintained that the North-West Passage was then discovered, and that it only remained for us to make it in the ship.

The pressure of the ice about us rendered it necessary to unship the rudder, with little apparent probability of ever using it again; and we still continued to be drifted slowly in the desired direction. For the next few days, nothing of consequence occurred to enliven the aspect of affairs. We hoped for anything that would drive us to the northward, at whatever risk—even a south-west gale, critical as was our position, was earnestly desired, as the season of navigation had from appearances evidently come to a close—the temperature fell to 4°—and there was little probability of our being again released from the grasp of the ice. We were slowly drifting alternately north and south, but the latter preponderated, having lost seven miles since the 18th—the soundings varied from 50 to 66 fathoms. No water was seen until the 21st, when the wind having freshened, a narrow lane was observed extending along that western shore (which we ought not to have left) to the northward as far as the eye could reach; but no effort of ours could then move the ship. On the 23rd, we had again sighted the islands (subsequently called Princess Royal)—a strong proof of our being drifted to the southward, and now immediately fixed in the pack; which was so close that

we were able to walk over its rugged surface. There was marked evidence of some powerful force acting on it from the northward. It had been recently split and hove up in several places, as it met with obstruction to its progress from the islands to the south. Our position thus drifting in the pack was an extremely critical one, and we were unable to avert any calamity to which we might be exposed. The ship powerfully strengthened as she was, could but feebly resist the enormous pressure that might be brought to bear against her. To guard against any sudden casualty, it was considered judicious to get twelve months provisions on deck, to be available in the event of the ship being nipped, or otherwise seriously damaged.

A flock of Ducks were seen, and the usual cheerless character of the weather was enlivened by a very brilliant sunset. On the 24th, the wind changed into the north-west, and blowing fresh, became intensely cold: and the barometer steadily falling foretold the approach of the Equinoctial gales.

As the day advanced our position became more hazardous. Still drifting with rapidity, we were carried between the island and the western shore, with every probability of utter destruction to the ship. In a small indentation of the coast line, a heavy floe of grounded ice was observed, towards which we were steadily borne. In the event of our becoming fixed between this and the one to which we were

attached, with the same overwhelming pressure setting down from the northward, the 'Investigator' must have been inevitably crushed to pieces. Should we succeed in keeping clear of this floe, we had the prospect before us of being driven on shore with the loss of the ship, or of being carried out of the Strait fixed as we were in the pack, with all the horrors and dangers of such a position. Our only hope of escaping either danger, depended on the probability that the floe to which we were attached would ground, and remain entire before we came into contact with that nearer the shore; or that the wind would change, and thereby arrest the progress of the pack that was steadily setting down.

About 9 A.M., from the continuance of the heavy pressure, the integrity of the floe to which we were secured, and on which so much depended, became seriously threatened. As soon, however, as its most distant edge encountered resistance, a prolonged, heavy, grating sound could be heard; and next moment a fissure, in it extending to the ship's side, presented itself, which gradually opened out a few feet, and for a time relieved the ship. Our situation was then, indeed, one of extreme danger, and our safety solely depended on the remaining part of our floe remaining entire. We were still drifting slowly and helplessly towards shipwreck, when, through the mercy and goodness of Providence, about 10 P.M. the broken mass grounded in 10 fathoms

water ; our drifting was arrested, and partial safety, as we thought, secured for a time. So long as the floe kept intact, and our cables held, we might be able to maintain our position.

We were thus helplessly borne along to what appeared our certain, almost immediate destruction ; the immense sea of ice in motion, carrying our vessel as it were, in its grasp, with huge masses borne along, tumbling and toppling over each other as they met with resistance, or overborne by some more powerful field sweeping everything before it, and with an ominous sound, grinding and crushing against the sides of our beleaguered ship, causing every timber to vibrate, as a proof of its irresistible force. The prospect was, indeed, appalling to the boldest of us. Evening closed in, cold and squally, carrying the snow drift in dense clouds over the barren, desolate land we were approaching, and to which we looked a sour refuge under a contingency that appeared inevitable. After a while, the pale light of a waning moon partially revealed our position, and dispelled much of the gloom upon our minds which the darkness had created.

Until midnight, the ice could be both seen and heard drifting to the southward, between our position and the island, as the sound of conflict amongst its masses was borne on the blast, enhancing our sense of gratitude for partial security. Part of the provisions, tent equipage, housing, skins, blankets, clothing,

sledges, fire-arms, and such other things as were likely to be useful, had been got on deck, and we were told off to our respective boats. On the completion of these arrangements, the men were ordered below, to select a change of warm clothing, and a pair of cloth or snow boots, and were refreshed in the usual manner, after the great exertion they had previously undergone. Never did a body of men view their impending fate with more composure and firmness, or exert themselves in a greater degree in the performance of their duties ; indeed for as danger or difficulties increased, in an equal degree did their zeal, cheerfulness and good conduct excite our admiration.

On the morning of the 25th, there was no alteration in our position from midnight, as the floe remained steadily aground, but we were severely pressed by the ice as it drifted past us during the night. Daylight revealed to view an immense field of heavy floe ice, lying between us and the islands, extending north and south as far as the eye could reach ; its surface rugged and unequal from its high, hummocky character. Some distance to the northward it was rendered wonderfully striking, by the appearance presented by two lines of lofty hummocks, extending diagonally for a short distance, very much resembling land, being dark in colour, with streaks and patches of snow interspersed over its surface, as on the neighbouring coast. This was evidently the great floe which had been for days in motion,

driving us before it—had doubtless come out of Barrow's Strait. The heavy loose ice which it now crumbled up and packed together, was sent against us with increasing pressure, conveying very unpleasant evidence of its colossal power, and great antiquity, as it must have been the growth of centuries. About 5 A.M. owing to this increasing pressure, the ship complained severely, and our proximity to the edge of the great floe, the distance not exceeding thirty yards, with heavy ice broken into fragmentary masses intervening, our great hope of safety still remained in the steadfast little floe, to which we tenaciously clung, and the bond of connection was still farther cemented by the strongest ties our resources could effect. We laid out a stream chain, one nine inch, two six inch and two five inch halsers, with anchors attached to each; more we could not do, and it only remained for us to await the result with resignation.

Our soundings, up to noon, remained unaltered, when they shoaled to $9\frac{1}{2}$ fathoms. We had observed a short time before, that the large floe was setting to the north-east, diametrically opposite to its former course, and against the wind, which still blew, with the force of a gale at the temperature of zero, from the same quarter; but about 2 P.M. it was again observed to pursue a south-casterly course as before, no doubt from tidal influence, and thus continued for the remainder of the day at the rate of two miles per hour. Towards evening, its northern end was abreast of the

ship, and the ice packed into lofty mounds rose everywhere about us. The appearance of those ponderous masses thrown up and piled thus together, forcibly told us what our fate might be. Our position was evidently becoming even more critical, as we found ourselves drifting to the southward, nearing the shore until we had shoaled our water to eight fathoms, about 10 P.M., when our progress was fortunately arrested—the floe having brought up against grounded ice. Thus closed a day of the same wild, gloomy character as the preceding, in perfect keeping with our prospects. Throughout the night we were again drifted to the southward, and at 5 A.M. on the 26th, we came in contact with a large floe piece, which striking the ship on the starboard quarter, swung her completely round, carried away one five inch halser, and started all the anchors, six in number, off the floe.

The crash and heavy grating noise fell on the ear with anything but an agreeable sound. I was awoke by the vibration of the timbers, as if the ice was coming through them, the great amount of pressure having come on the quarter close to my cabin. As may be supposed, I at once proceeded to satisfy myself of the exact state of affairs on deck: but happily no other casualty had occurred. No time was lost in remedying the disaster, and we were again secured to the same floe, with a nine and six inch halser. We were then drifting with it, a repetition of the previous

precautions therefore became unnecessary, as we had not the same amount of pressure to resist. Soon after this occurrence, another large piece of ice struck the rudder head, which was swung for the sake of security, about six feet above the water line across the ship's stern, and carried away the life-buoy. Some idea may be formed of the stupendous nature of the ice that assailed us, from the fact of its striking the rudder head at such an elevation—a repetition of which was guarded against by hoisting it still higher.

We continued throughout the day steadily drifting to the southward. At evening the islands bore N.N.E. four miles distant, and the wind abating, the ice opened as the pressure diminished, and a few narrow lines of water could be seen here and there. This tended very materially to ease its embrace on the ship, and we had got more into the centre of the Strait, sounding in from 34 to 62 fathoms water. We lost sight of the islands as darkness set in. The night was a restless and anxious one to all, from the quantity of heavy ice which frequently struck the vessel, pressing and grinding against her trembling side, but fortunately with no serious consequence.

Towards morning, on the 27th, the wind had fallen very light, and was succeeded by a calm, when the islands which we supposed had been seen the evening before for the last time, were again visible, as we were then drifting slowly to the north-east. The tide

having arrested our southerly progress during the night, was again bearing us in the direction whither we had come, but towards the opposite side of the Strait. Still even this change was a subject for congratulation. Several small spaces of open water having opened around us, afforded room for the ice masses coming up from the southward to drift more rapidly, grinding against us in their course ; that, to which we were attached, necessarily moving more slowly from its greater magnitude ; and thus we continued borne along at the mercy of the elements. Although the temperature remained as low, the cold was not so severely felt as on the few previous days, owing to the absence of wind ; but everything wore a most wintry appearance and the moisture of the atmosphere rapidly freezing as it fell, gave a coating of snow-white frost to the yards, rigging, and every part of the ship. We enjoyed much more quietude than we had known for some time, from the continuance of the calm. There was not the same imminent danger to be apprehended, and we were pleased to know that we were slowly recovering our lost ground to the north. As night fell, some heavy flocs came into dangerous proximity under our stern—their progress to the eastward having become arrested in some way or other, which would render our position critical were they to close.

A strong south-westerly wind having set in early on the 28th, with snow, had brought us considerably

nearer to the islands, and bore us steadily onward to the north-east. We were subject to heavy pressure and severe knocks from time to time, as the floes passed on their course, wheeling the ship to and fro, wherever a space of open water existed ; and, when this was absent, we had to sustain the pressure of the collision. Towards evening we had approached much too near the islands to be agreeable, as their stern, precipitous outline frowned ominously on us ; and apprehensions were entertained that, if still borne on the same course, we might come in contact ; but when abreast of them—the ice having become packed into closer space, with the wind pressing on it from the southward—we, together with our devoted little floe, were made to describe a circle, and we were borne along for some distance stern foremost. The ice forcing a passage for itself to the northward carried us with it, and removed the imminence of the danger which threatened us—unless the wind should change, and again drive us to our original position. We had thus completed a circle round these remarkable islands ; and it was by no means improbable, from the helplessness of our situation, that this might be repeated. Throughout the 20th, we continued to be drifted steadily to the northward, with a repetition of all the hazards and incidents, but more slowly than before. There was every appearance of the pack becoming stationary ; and no one doubted that our winter must be spent in its grasp, as we considered the Polar Sea had finally closed against any further attempts at

navigation this season. Our long-cherished wish of reaching Barrow's Strait was, therefore, relinquished.

The last day of the eventful month of September came, and was one of those fine, cold, and clear Arctic days which we had occasionally experienced. The temperature fell below zero for the first time; and we commenced dismantling the ship. The top-gallant masts were sent down, sails unbent, and other preparations made for housing in, and resisting the rigour of the cold then rapidly increasing.

The calm stillness of the atmosphere afforded us a magnificent "Parhelion" from which a zone of pale yellow light encircled the heavens, contrasting beautifully with the azure blue and the softened mixed tints of the sky, that imparted much splendour to the general effect of this lovely phenomenon—a source of considerable awe and terror to the very early navigators of the Polar Sea. A faint Parasellena was observed the previous evening, but was not remarkable for its beauty. Nearly the last of the feathery tribe was also seen—a solitary Ptarmigan wending its way to the south. Several Seals made their appearance wherever there was a little space of water to be found, and the stillness of the day was frequently interrupted by the hoarse croaking of a couple of Ravens which kept flying ominously about us—the sound falling mournfully on the ear.

Nothing of unusual interest or excitement occurred for the few first days of October; the ice was still

moving a little, pressure occasionally experienced, and the wind, and general character of the weather alternating from time to time. As the ice was not sufficiently firm to admit of our going for any distance from the ship, a few of us (the officers) occupied ourselves in excavating one of the large hummocks of ice on our devoted floe, to perpetuate our grateful remembrance of mutual attachment. I can give no better idea of its heavy character than by stating, that this mass was 10 feet high, and 20 feet long, of an elliptical form. In it a beautiful grotto was formed, its interior presenting an appearance of extreme beauty, from its ultramarine, semi-transparent structure. Narrow channels of water were occasionally seen, and the distant sound of ice in motion was, at times, distinctly audible. On the morning of the 4th, heavy pressure came again on the ship, which continued with more or less force throughout the day.

At 8 p.m., all being still and silent about the ship, we had again evidence of its being in motion; but the suddenness and force of the movement were far different. The whole mass of ice to the northward of our position appeared as if under the influence of some wonderful convulsion of nature, as it came with alarming force against the ship's side, making her timbers most sensibly complain. All hands were speedily on deck, without requiring the call of the boatswain; and they were afforded ocular demonstration of the perilous situation in which we

were again placed, and the danger there existed of being momentarily nipped, as the ice bore down heavily and steadily on us, and pressed us against the floe which had hitherto borne us in safety through such an adventurous course. While it resisted, the ship was elevated nearly two feet out of water, inclining about fifteen degrees to that side from which the pressure came. Had she not risen in this way, she would to a certainty have been nipped. This ceased to be probable from her altered position, but had the force continued, it must have thrown her broadside on the ice—fortunately it ceased within the space of fifteen minutes from its commencement. It was wonderful to view the heavy masses as they were thrown up in large fragmentary pieces, piled on each other, so as to overtop the taffrail, and touch the quarter boats suspended from the davits; and direful was the sound to which we listened, enveloped as we then were by the darkness of night. Some of us had knapsacks ready for a start, as it lay not in our power to do aught that could avert the danger; and all hands stood breathless on deck, until it again became suddenly silent. The great alteration in the appearance of the ice around us, from its crushed and broken up state, left sufficient evidence of the tremendous power to which we were only for a short time exposed, and so mercifully rescued. We remained, however, in an anxious uncomfortable state throughout the night, not knowing the

moment when our safety, and that of our old ship might not be again as suddenly imperilled. We dared not go to rest, but merely lay down with our clothes on, and knapsacks under our heads, ready to start on the first sound of alarm. During the middle watch, we had a repetition of the pressure, but less heavy than before; the creaking and grinding against the ship still told us of its being in motion; it had the effect, however, by assailing the ship from the opposite side of placing her again nearly upright. On the morning of the 5th, we found we had been carried to the southward, and had approached nearer the islands, and the eastern shore—a lane of water had also appeared in the direction of the former, in which a few seals were sporting.

Several experiments were made to test the power and efficacy of gunpowder in blasting ice, under the immediate direction of Mr. Wynniatt, (mate), who had been instructed in its use prior to our leaving England, and under whose superintendence all our subsequent operations with this powerful agent were successfully and zealously conducted. The agency of gunpowder in blasting ice having been hitherto unknown, and untried in ice navigation, much interest was consequently attached to the few experiments we then made on a small scale. These were attended with success, and afforded us the pleasing evidence of the powerful auxiliary we had at command for future operations.

As we considered it by no means improbable from our position in the centre of the pack, that the ship might sooner or later be thrown on the floe from the pressure to which she was subject, it was resolved to give her as smooth a bed as possible; accordingly several small hummocks, alongside, were speedily and successfully removed by blasting. The pressure still continuing from time to time, several large pieces of ice got under the ship's stern, which elevated it considerably, throwing her over also on her port side. Numerous rents and fissures were everywhere discernible—evidence of the power still at work.

In the evening we were favoured with a most brilliant *Aurora Borealis*, extending from west to east, and to the southward of our position. Its broad and irregular undulating streaks of golden yellow light, splendid and evanescent as they were—at one moment, subtly flitting to and fro with electric rapidity at another, forming huge masses of electric light, from which streams appeared as if falling to the earth in a shower—most beautifully illuminated the heavens, and cast a brightness over the trackless wastes of ice and snow that surrounded us. As the weather was at this time generally cold and calm, the sunset was for the most part very beautiful. The prismatic tints of his reflected brilliance, diffused in a line of softened and subdued splendour on the western horizon, imparted an appearance of extreme loveliness to a scene, which darkness overshadowed

too soon. Subsequently we were compensated by a grand display of the beauties of the Aurora.

Throughout the entire of the 6th, we were subject to a repetition of the same pressure, and were kept in the same degree of painful suspense, from the continued movements of the pack, influenced as they were by the effects of wind and tide, which still bore us to and fro; but we were evidently shortening the distance between us and the islands.

On the 7th, all the work preparatory to housing in having been completed, the routine of labour and exercise for the ship's company throughout the winter was commenced. The former was of a very light nature and merely consisted of what pertained to the internal economy of the ship; the latter ensured to each man, at least, six hours exercise out of the twenty-four, in the open air—a system which was attended with admirable effects, and contributed largely to the maintenance of health, kept the mind in a state of buoyancy and cheerful excitement, and enabled us successfully to resist the depressing influence of an Arctic winter.

Early on the morning of the 8th, a huge mass struck the ship on the quarter, and swung her round, leaving a space between her and the floe of about four feet; but before an anchor could be laid out and hove on, to bring her into the former position, the ice that was blocked about her stern and under the keel, at once, rose to the surface, and occupied the

vacant space, which, together with the rapidity of the freezing, prevented us from regaining our position. There was, at the same time, a general movement in the pack; this commenced with a low rumbling noise, resembling the distant roar of the sea, until it reached the ship, when we were amazed at seeing immense masses slowly and gradually raised to different degrees of elevation, others crumbled to pieces, or packed on each other, and the same force slowly but surely approaching ourselves. Our astonishment rapidly changed into intense anxiety for our own safety.

On the 9th, there was no material difference in our position—the motion having apparently ceased with the cessation of the spring tides; and we enjoyed a day of comparative comfort. The weather continued beautifully clear and serene, with an occasional light air from the westward; the temperature generally varying from five to six degrees below zero; which promised well for a journey contemplated, next day, to the neighbouring land.

CHAPTER X.

Appearance of Weather—Departure from the Ship—Journey across the Ice—Reach Prince Albert's Land—Take formal possession of it in the Queen's Name—Ascend the Mountain—Incidents—Appearance of Land and Ice—Our View from its Summit—Existence of a North-West Passage established—Descent—Refreshment—Journey across the Ice arrested—Critical Position—A Night's Adventure—Incidents—Arrival of Relief—Return on Board—Halkett's Boats—Results of the Day—Celebration of taking possession of Prince Albert's Land—Ship stationary and Position—Preparations for a Journey to the Northward—Visit Princess Royal Islands and take possession—Appearance of Ice grounded—Geological Character of Islands.

THE morning of the 10th of October was ushered in with scarcely a breath of air, and with the temperature 10° below zero; nevertheless, there was a mildness in the atmosphere, a stillness and serenity all around—the marked peculiarities of a fine Arctic day—which tended to impart a degree of grandeur to the stern face nature here presents, and which, under less favourable circumstances is ever wild and dreary. It was then

quite a calm ; but the barometer having fallen a little, and a low, dark line at the same time forming on the southern horizon, led us to believe that the wind might soon be expected from that quarter.

Under these circumstances, and the ice not having been observed in motion for the previous forty-eight hours, at 5.30 A.M. Captain McClure, Lieutenant Crosswell and myself, accompanied by the interpreter and four men, started from the ship, some of us carrying guns, others boarding pikes ; the men with the apparatus for cooking their dinner, pick-axe, shovel, flagstaff, &c.—all necessary implements for the service we were going on. We shaped a direct course for the eastern shore opposite to the ship, where the land appeared more elevated and rugged, than the gradually sloping hills on either side, and from which the ascent of the mountain might be commenced in nearly a straight line. Our course lay over hummocky and packed ice, with occasional intervening fields formed within the few previous hours, flat and even as a board, with here and there marginal lines or boundaries of a few inches high—the effects of pressure from without, cracking the young floe, and throwing up these little boundaries ; thus dividing it into distinct patches or fields. The appearance presented by the little tufts of hoar frost strewn over the surface, was very beautiful ; some crystallized in the form of spicula, and others larger, of a stellated form, closely resembling small feathers, from their well-

marked pennated structure. Far surpassing all in brilliancy and splendour, was their power of decomposing the solar ray, and presenting the most rich and gorgeous display of the prismatic colours that I have ever beheld; forming a carpet, as it were, studded with gems of the first water, whose dazzling brilliancy was absolutely exhausting to the vision.

Our progress was arrested by a stream of young ice, which obliged us to make a little *détour* to the northward; our pikes proving of much service in testing its power of bearing; and thus we pioneered the way, until within about one mile of the shore. Here we discovered that the field on which we were walking was in rapid motion, and passed along the inshore grounded floe, in such close contact as to throw up some heavy pieces, packing them together. As it was our object to get on the grounded floe, and so on to the shore, feeling satisfied that the motion was entirely owing to the tides, I approached the edge of some young ice to test its capability of bearing us with my pike, when it gave way under me, and I fell, but was quickly picked up by some of our party, with only partial immersion. A little further on we found it stronger, and after the exercise of some adroitness and activity in our movements, managed to clamber up the sides of the inshore floe, when the ice was still in process of packing. It afforded us no very steady footing, but ultimately we succeeded in passing this formidable outwork to the shore, on

which it had been forced up to the base of the cliffs we were approaching, from the effects of the late movements in the pack. We computed the distance from the ship to be about five miles. This part of the coast presented a bolder appearance than elsewhere; its almost vertical escarpment was interrupted in several places by deep gorges, and up the precipitous side of one we ascended; the looseness of its sandy soil enabling us to do so with comparative ease. On attaining the summit of this cliff, about 150 feet high, we assembled our little party and took formal possession of the land in the name of our most gracious Sovereign; bestowed on it that of her amiable Consort—planted the ensign of St. George, and, with three hearty cheers, completed the ceremony by drinking health and long life to our beloved Queen and His Royal Highness Prince Albert.

We then prepared to ascend the high land, leaving the four men to erect a mound and land mark, and prepare their dinner during our absence. The general aspect partook of the usual undulating, hillocky character, with the same unvarying sterility and barrenness. Ranges of hills rose above each other, intersected throughout by deep gorges and ravines; the soil sandy, its surface covered with stones and shingle, with a few blades of withered grass scattered here and there, wherever a little sand had accumulated; but never was Nature more sparing of her gifts, than appeared in this scanty herbage.

The ascent was gradual, in the ravines, through which we passed; snow had accumulated in great quantity, into which we sunk deeply, rendering it fatiguing, from the efforts required to extricate ourselves; but when it had become consolidated and frozen elsewhere, the walking was pleasant. We steadily continued our advance until the summit was attained, about 1 P.M., and having been for so long a time without any exercise, (except what the ship afforded) we felt rather tired on reaching the top, after this wearisome journey. We then found ourselves above the range of vision from below; the ground flat, with the same uniform, pebbly covering as elsewhere; and the height from the sea level not less than 1,500 feet. The land, as far as we could observe, was of the same uneven, hilly character, with numerous lakes interspersed about the base of the hills; the general features, and open character of the country were pleasing, if such a term can be applied to barren lands. They appeared to be seen then to greater advantage, with their partial snowy garb, than when the nakedness of the land should be exposed by its absence.

Our view to the northward, however, was rather more cheering—notwithstanding the deceptive appearance ever caused by distance in Arctic regions, when the atmosphere is highly refractive, and where ice and land are often so intimately blended together, that it is often impossible to distinguish one from the

other. We could clearly trace the termination of the western land, or that of Banks', to a headland or cape of considerable elevation, while that on the eastern side trended away to the north-east, with a clear, undoubted field of packed ice, intervening—continuous with the Strait of Prince of Wales, in which the ship then was. Everything, therefore, was fully confirmatory of the opinions previously formed, *and no doubt could remain as to the existence of a Passage.* From the summit of that hill, I felt convinced we were looking on the ice-packed Strait of Barrow, that the highway to England from ocean to ocean lay before us, and that we had incontrovertibly established the existence of a "NORTH-WEST PASSAGE."

As the temperature did not admit of our remaining long at rest, we commenced the descent, delighted beyond measure at the result of our observations; and, as the luncheon carried in an outside pocket had become so hard frozen that we could not eat it, there was no unnecessary delay. The descent was much less fatiguing, and more rapidly performed than the ascent, and we had occasional evidence that the land was not destitute of animal life, barren as it was in vegetable, from the numerous tracks of Foxes, Hares, Reindeer, Ptarmigan. A small orifice in the snow, indicated the burrow of the pretty little Lemming (*Mus Hudsonius*) in those inhospitable wilds, and in a deep gorge close to the beach a zigzag bearpath was observed.

At 3 P.M. we rejoined the men who received with satisfaction, equal to our own, the result of our visit; they had completed the erection of the mound in the centre of which a pole was placed, supported by guys, for a landmark. We hastily refreshed ourselves with a little water made from melted snow; the men were unable to cook their dinner, for on opening the tin of preserved meat, it was so hard and frozen, that it could not be pierced with a boarding pike, and they had not spirits sufficient to thaw it; they were consequently much in the same position as ourselves. At 3.30, having taken a hasty survey of the state of the ice, and no water being discernible, we commenced retracing our path. We reached the beach, crossed the floe for about a mile, with the usual amount of difficulty, anxious to reach the termination of this outwork, and tread once more those level fields of ice we had passed over with so much pleasure in the morning. But, what was our consternation, on reaching the outline of this packed barrier, to behold our further progress towards the ship arrested by a channel of open water, about twenty yards broad, rapidly increasing, and extending along the floe as far as we could see. Our first idea was to detach a piece of ice sufficiently large to enable us to paddle across one or more at a time; but in this we failed, as the only piece we could obtain was quite unfitted for that purpose.

We looked to the north, but found that nothing

could be done in that quarter. To the southward matters appeared more favourable; the channel had assumed a tortuous course, conveying to us the idea of its having become narrower, and perhaps closing with the floe might enable us to effect a passage. We accordingly wended our way to the southward, as near to the water's edge as we could go, over heavily-packed, rugged ice—our eyes eagerly directed to the line of this fatiguing march—and the frequency of our falls from time to time by no means adding to our comfort. We then advanced for the space of a couple of miles, and found the appearance presented by the ice, from where we had first viewed it, utterly deceptive; the lane of water grew wider as we advanced, there was no more propitious aspect in its state further to the southward, and we had then got abreast of the islands. We accordingly halted on a large elevated piece of ice. Previous to approaching it, we had crossed the recent track of a bear, and expected to encounter him at every turn of our progress, but were disappointed. We assembled in a body on the top of this floe, endeavouring to attract attention from the ship, then some five or six miles distant, and fired several rounds of musketry in the hope of the flash being seen—it was then becoming rather dark, and our situation far from enviable. The sun had disappeared, the clouds looked dark and lowering, a breeze was gradually springing up from the south, our clothing was light, we had no provisions, nor the

slightest covering to protect us against a temperature of 15° below zero, much fatigued and exhausted from our long march and want of food; and, under those circumstances, there existed every probability of our passing the night on the ice. Having about a gill of spirits of wine left, and as thirst was urgent amongst all, we melted a little ice, and were each afforded a mouthful of water, which proved extremely refreshing. As the cold had become severely felt, from the lightness of our clothing, we could not remain at rest more than a few minutes at a time, owing to the rapid abstraction of animal heat, and were consequently obliged to keep in constant motion. We then concluded that in the probability of our departure from the shore having been observed from the ship, and as we did not get on board at the time, when we might be expected, in the event of a party being sent out to our relief, they would doubtless be sent towards that point of land where we had been last seen, and where the land mark was erected. We, therefore, retraced our steps over the rugged, slippery course, which it had cost us so much labour to cross but a short time before. It had then become quite dark, and as we were unable to distinguish the unevenness and irregularities of the ice over which we walked, or rather clambered, we were falling incessantly. We appeared to have lost due power over the limbs, from the effects of cold and exhaustion—the alteration in the ice, and our intense thirst, affording ample

evidence of both. We had advanced about a mile, our eyes anxiously directed towards the ship, when we halted to fire our guns, in the hope of receiving some token of observation; but in vain. Again we started—a light was seen hoisted at the mast-head of the ship, but this was nothing more than what might have been expected to point out her position, and did not allow us to hope for any immediate succour. With the increasing darkness, the appearance of the weather had become more dreary and wilder than before—thus cold, hungry, and thirsty, without covering, there was increasing probability of our spending the night on the floe, and as our small stock of ammunition was well nigh exhausted, the chances of our being able to attract a party to our position were likewise diminishing. Rockets were seen fired from the ship, and a gun at intervals; but like the light at the mast-head, they afforded us no other comfort than the knowledge of its being done to direct our homeward course.

Once more we halted, and fired a few shots, without receiving any recognition, and again pursued our way over the rugged and slippery hummocks, in search of a large piece of ice with a good depth of snow around it, under the shelter of which we might pass the night. We had given up hope of receiving any relief, or of being found by a searching party from the ship until the morning; and having fired our last charge of ammunition, our entire strength for attack or

defence, if we met with Bears, which we knew were prowling about, lay in boarding-pikes.

We were then in search of our resting place, when, to the inexpressible delight of all, we saw the flash, and heard the report of a musket, apparently coming in our direction. We immediately halted, raised a loud cheer, repeated it again and again, and on the third occasion, to our great joy, it was responded to. By cheering frequently, we directed the party towards us, and had the pleasure of knowing that relief was at hand, as we presently saw dark figures on the opposite side of the channel, coming along its margin towards us, and soon communicated by words with Mr. Court, Second Master, and a party of four men across the water.

Unhappily they had come unprovided with aught that could give us relief, although they had been dispatched from the ship at six o'clock, to render assistance, lest any casualty had befallen us. Our situation, therefore, was not much improved, as they did not consider that water had arrested our progress, and the only relief they could afford us, was that of their individual prowess, which, under the circumstances, was quite unavailable. This officer was directed to return to the ship immediately with his party, and rejoin us with all despatch, with one of Halkett's portable boats, all the men that could be spared from the ship, and a supply of provisions for immediate use. He was, likewise, directed to fire a

blue light and rocket on reaching the ship, and two of each when he left on his return to us.

We then felt satisfied that we should reach the ship about daylight, and our friends having left us after eight o'clock, we calculated on their return, at least, at midnight. Our spirits rose with a speedy prospect of relief, and we again put ourselves in motion to resist the intensity of the cold; several of us having already been frost-bitten. We had no food except a little frozen preserved meat—so hard, that nothing could penetrate it—and on attempting to eat it in this state, the mucous membrane of the mouth was excoriated on touching it. The thirst being intense, we experienced the greatest relief from a mouthful of water. As a last resource, with the aid of a few matches, the wick that had been immersed in the spirits of wine, and some pieces of paper, we contrived to melt as much ice in our little kettle, as afforded to each of us nearly a wine glassful of water—which proved a great luxury, although a little brackish. We were once more in motion, clambering over the rough slippery ice to promote warmth and kill time; with falls heavy and frequent, as it was impossible to see our way clearly in the darkness. Time thus wore on, while we still wandered about, occasionally taking a few minutes' rest, with an irresistible desire to sleep, until the cold compelled us to be again in motion. About 10 P.M. a light could be seen approaching us from the opposite side of the water, and soon afterwards the signals we had

directed to be made on the return of the party, were fired in succession from the ship. It appeared to us incredible that they could, by any possibility, have reached the ship, and returned in so short a space of time; but that it was them, the response to our cheer, the sound of voices, and their presence soon afterwards on the margin of the ice, fully verified. Their early return was thus accounted for: at 7 P.M., an hour after the departure of the first party from the ship, two others had been dispatched in search of us, respectively under charge of Messrs. Wynniatt and Sainsbury (mates). Each had one of Halkett's boats, and were provided with blue lights and rockets, that they might be able to maintain communication by preconcerted signals, having proceeded in opposite directions. It fortunately happened that the party returning to the ship, fell in with that of Mr. Sainsbury, and informed them of our situation; the latter returned at once to the ship for provisions, giving the former, Halkett's boat, to hasten to our assistance, at the same time signaling to Mr. Wynniatt's party to close, which they speedily did. We then stood on the margin of the ice, almost helpless from the effects of cold, fatigue, and hunger, anxiously awaiting the arrival of the boat, which Messrs Wynniatt and Court dexterously paddled across to our relief. They were heartily welcomed, but we found that they were unprovided with either food or water. No time was lost in ferrying us across two

at a time, and as the young ice was forming rapidly, we had to break it with our pikes to make a channel for the boats. We proceeded in the direction of the ship, as rapidly as our exhausted state would allow, the march harassing to a degree, from our constant falling and tumbling about like drunken men; whom we resembled not only in gait, but likewise in speech. We had not proceeded far, when a signal was made from the ship, that relief was at hand, and when about half way, we had the extreme satisfaction of meeting with the Commissariat, under charge of Mr. Paine. (Paymaster), with an abundant supply of provisions, &c.

We came to a halt, threw ourselves on the ice, hastily partook of some food, and a draught of water, the first thing called for; this, by constant agitation, and by being nearly in contact with the skin, was maintained in the fluid state, and with some stimulants, greatly revived us. We again proceeded onwards. Some of my companions were scattered over the floe, which the relieving party went in search of. We found in the last part of our journey, the great benefit we had derived from the small quantity of food we had eat, and at an improved pace reached the ship at 2.30. A.M. heartily grateful for our deliverance from our critical position. The relieving party did not arrive until later—one or two of the men having become quite exhausted, could not proceed without assistance. Thus terminated a

memorable and eventful day. We had been eighteen hours absent from the ship—walking, I may say, the entire time. The distance exceeded thirty miles, which in consideration of the nature of the ground, was more trying than double the distance over level country; and what with the intense cold of the night, no tents, inadequate clothing, and entire want of food, had we not been happily rescued, there was but too much reason to fear, that morning would have furnished a serious list of casualties.

I cannot close this recital of the events of the day, without expressing the high opinion we entertained of the boats constructed with so much talent and ingenuity by Lieutenant Halkett, Royal Navy. I know nothing better or more portable for lake or river navigation; and to them we were entirely indebted for our safety, as ordinary boats could not have been conveyed across the ice, without sustaining such damage in hasty transit as would have rendered them useless. They are very light and portable, made of India rubber cloth inflated with air; the larger one capable of holding four persons, three comfortably, weighs only forty-six pounds; the smaller intended for only two persons, is of course lighter. Either could, in my opinion, be made equally available in conveying sick or wounded men when properly slung; and could not fail to prove a most useful addition to the equipment of travelling or exploring parties. They might, I think, be still further improved if made in compartments;

for in the event of being injured, the danger of the air escaping, would thereby be obviated—particularly when exposed to such a substance as the sharp spicula of ice. When the men had arrived on board, an extra allowance of provisions and spirits was issued to each, and I need not say how we enjoyed the supper that was prepared for us. The name of 'Mount Adventure' was appropriately bestowed on the high land we had ascended.

The following morning found us much refreshed by sleep, a few additions were made to the sick list, from some of the relieving parties, but they complained of nothing of a serious nature. Our party were well; we had all, however, been more or less frost-bitten on face, feet and fingers; but were not incapacitated from duty—the day was entirely given up to rest.

On the evening of Saturday the 12th, we celebrated the taking possession of Prince Albert's Land, by issuing an extra allowance of provisions and spirits to the men, to drink the health of the Queen and His Royal Highness; and the crew assembled on the lower deck, amused themselves for the remainder of the evening. Events such as these tend to maintain men in good health and high spirits from the cheerful excitement they afford. At this time, we experienced a severe loss in our preserved meat; nearly five hundred pounds of which was considered unfit for use. The weather had been variable for some days, for the most part cold, cloudy and over-

cast, and the ship apparently had moved but little; on the 14th, she was quite stationary, when we found our position to be in lat. $72^{\circ} 47'$ N., long. $117^{\circ} 35'$ W., which were our Winter Quarters, and about two and a half miles to the northward of the Princess Royal Island. The temperature on this day had undergone a wonderful and sudden change, having risen to 21° , with the prevalence of a north easterly wind; from which we concluded that there was still a large expanse of open water to the northward. This change we knew would only be temporary. Although no doubt could possibly be entertained as to the existence of a passage, nevertheless, Captain McClure resolved on visiting the extreme of either land, before the great fact should be officially recorded, and the darkness of an Arctic winter should finally set in. The men having been selected and approved of by me, they were told off for this service, and the necessary preparations for the journey to the northward commenced. Several excursions were made to the islands, on one of which a hare and ptarmigan were shot, and numerous fox tracks seen; every trace of animal life being eagerly looked for and watched in these regions.

On the 17th, Captain McClure and myself made an excursion to the northward, with a view of tracing out the best course for the travelling party; and the result of our observations was highly favourable as to the state of the ice for travelling. The day having

been beautifully clear and serene, enabled us to see a great distance; these cold, clear days ever imparting an appearance of stillness, loveliness, and increased solitude to these icy regions.

The weather on the 18th of October, although cloudy, indicating a fall of snow, was otherwise sufficiently fine to induce us to visit and take possession of the islands which formed such a prominent feature in our landscape. Accordingly at 9 A.M. Captain McClure, Mr. Court, myself, with the interpreter, and two men left the ship. Our way lay over heavily packed floe ice, with a few fields of that of recent formation. As we reached the extremity of the northern or lesser island, it was perfectly appalling to witness the magnitude of the ice grounded on it. The shattered appearance of these vast and broken masses conveyed to us a frightful idea of that colossal power which had left such destructive evidence of its action. We reached the larger island, and ascended to its summit, which is about 500 feet high, when we took formal possession in the name of the Queen, bestowing on the group that of Her Royal Highness, the Princess Royal. We had a cairn built around, and, with three cheers, planting a red ensign, we left it floating proudly in the breeze. We had then completed taking possession of all the lands we had discovered, and now form an integral part of the British Empire.

In our ascent to the top of this island, we found traces of its having been visited by Esquimaux at a

former period, although we could discover no wood nor any remains of their hunting implements—the formation of a rude cairn, in the centre of which was some loose earth, and a few well bleached fox and seal bones, left no doubt of its having been one of their store-houses. At the same time we observed, in close proximity, one of their ingeniously constructed fox-traps, entirely composed of stones, placed together in two lines, closed at the top and one end, with a small aperture at the other, sufficient to admit a fox, or other small animal; the bait is suspended in the centre, and on the animal reaching and seizing it, the trap is so constructed that a heavy stone falls on it, which ensures its capture, if not death. These remains had every appearance of antiquity, and we assumed that the Esquimaux had made this a temporary halting place in their passage through the Strait at some remote period.

The smaller and more northerly one, is of very limited extent; being in length about 500 or 600 yards, in breadth 50 yards, its average height about 100 feet, inclining at an angle of about 45 degrees to the eastern shore of the Strait. On close examination it appears formed in irregular steps or ledges, as though, as may be readily imagined, from a large mass of matter in a soft state, slowly but steadily upheaved from the bed of the ocean, and partially falling away while emerging from the surface of the water. The greatest elevation is attained in the centre, where its

western aspect is for a short distance vertical; on either side of which, it inclines at a very abrupt angle to the westward, about 15° , so as to convey the idea, (with the exception of the space I have mentioned) of its being on the principle of an irregular double inclined plane. This little island is rich in fossil remains, chiefly Corallines, (*Eucrinites* and *Pentacrinates*); the upper surface is composed of small stones and pebbles, with coralline ledges closely cemented to each other; and the rock beneath, which is composed of granulated, bituminous limestone, emitted an offensive odour when struck or fractured, and in some situations was plentifully studded with garnets. Numerous uni- and bivalve fossils, chiefly species of *Cyathopyllum*, *Turbo*, *Buccinum*, *Orthis*, and *Terebratida* were likewise strewn on the surface, presenting good specimens of calcareous petrification.

The second or larger island is situated about half a mile to the southward of the preceding, extending nearly due north and south for the extent of a mile, with a mean breadth of about 600 yards. It is elevated in the centre about 500 feet, from which it gradually decreases, but presenting throughout, except for a small space on its western aspect where it is sloping, a bold and precipitous front, varying in elevation from 80 to 400 feet. The soil, (if such it can be called) is entirely composed of a sandy scoriaceous admixture of small stones and pebbles, with numerous volcanic boulders, embracing granite, gneiss, syenite, green-

stone, fragments of basalt, &c., strewn over the surface—a few scanty tufts of withered moss attest the extent of its fertility during the short season of vegetation.

The southern portion of the island, appears to be one mass of fossiliferous remains of Zoophytes, Corallines, and a few uni- and bivalve shells, similar to those before mentioned. These fossils were found imbedded in dark, bituminous clay or shale, of remarkable hardness in some places, but brittle in others, when there existed a ferruginous admixture of brown Hematite, of which the southern portion of the island is entirely composed. On advancing to the northward and towards the centre of the island, the fossils became less numerous and soon disappeared, a dark laminated clay, of a dry compressed sooty like structure takes their place. Although there was here no distinct coal formation, yet on fracturing some pieces, a narrow carbonaceous line, with the coal lustre, could be discerned, such as it presents in a half burnt state, and this was more marked as the land became more elevated, of course displaying to view a deeper stratum of the earth's crust. The remainder of the outline of this island for a portion of its western, and almost the entire of its eastern aspect, is composed of lime and iron stone, rising vertically, and containing a few fossils, extensively coated with depositions of sulphur and iron in combination, and emitting an offensive odour when fractured. The geological

character of these islands from the specimens obtained, is, therefore, associated with the Carboniferous era of the earth's formation.

Nothing of any consequence occurred for the next few days ; and we were gradually becoming initiated into the usual winter's routine. The weather had maintained a pretty favourable character, such as pertains to a closing season ; and on the evening of Sunday the 20th, all the travelling preparations were completed for the journey to the northward.

CHAPTER XL.

Departure of the Travelling Party—Passage over Rough Ice—Fatigue Party—Their Route and Return—Accident to Sledge—Despatch a Sledge and Party—A Shooting Party—Five Musk Oxen killed—Measures adopted—Animals brought on Board—Quantity of Meat obtained—Return of Captain M'Clure—Confirmation of the previous Discovery of the North-West Passage—View from Mount Observation—Parry and Richardson—Points Peel and Russell—Homeward Journey—A Night on the Ice—Reception of the Party—Difficulties and Hardships of the Journey—Food consumed—Pemmican and Oatmeal—Housing in—Ventilation and Warming Ship—Early Days of November—Occupations of the Men—Departure of the Sun—Aspect of Winter—Weather—December—A Fox Hunt—The Solstice—Christmas—A Seal—Weather—Last Day of the Year.

On the morning of the 21st of October, all was bustle and excitement on board the 'Investigator'; Captain M'Clure having determined to start on his projected journey to the outlet of the Strait, to verify the fact of our previous discovery. The day did not present a very auspicious appearance, being dull,

cloudy, and overcast, with a light breeze from the south-east, and the temperature 4° below zero. As this was the first travelling party that had left the ship, it excited a great degree of interest amongst us. At an early hour the sledge with provisions and other requisites for seven men for fourteen days was packed in readiness, but as the state of the ice did not admit of its safe transit for a distance of a couple of miles from the ship, the entire strength of the ship's company was employed for carrying the articles separately over this space. Accordingly at 7 A.M. all hands were assembled on the ice, and on the word of command, started towards the north-east; having previously given the travellers three cheers, which was heartily responded to—a custom always followed on the departure or arrival of travellers in the Arctic regions. The party, about fifty in number, each carrying some articles of the equipment, presented a strange and novel appearance as they wended their way over the ice, following the course pointed out by the pioneers, until the rough ice was safely crossed at 8 A.M., when we halted and repacked the sledge. The fatigue party consisting of eight men, with Mr. Wynniatt and myself, then put themselves in harness and advanced; the remainder of the crew greeting us with three cheers, retraced their steps to the ship. Our course for the space of an hour lay over a fine level space of young floe, parallel to and distant about three miles from the eastern shore, after which we came on some

very heavy packed ice, which we could not attempt to pass, but kept away along its edge for the remainder of the journey. When about fifteen miles distant from the ship, it was not considered prudent that we should proceed further; a heavy snow drift coming on, difficulty might be experienced in again finding the ship, and being without a tent or other covering, we were obliged to return.

Captain McClure, (who was accompanied by Mr. Court for the purpose of taking observations), and a party of five men, having previously refreshed themselves with a little water and biscuit, then took charge of the sledge—our little band speeding them on their way with three hearty cheers, which they as heartily returned and proceeded on their journey. There was a strange and pleasurable feeling of excitement in this scene—one small group of men cheering on another proceeding upon an enterprising and hazardous service, enveloped, as we then were in a cloud of snow-drift. We turned from each other, and were soon lost to view, but gladly would any one of us have participated in their labour had it been so decreed. Our party requiring some refreshment after their long march, we found that the delay of a few minutes produced such intense cold, with a sharp cutting breeze against us, that we were unable to halt, and were accordingly obliged to eat as we kept moving, each of us having been provided with a day's provisions. We followed the westward

route, and, about 5 A.M., having crossed the recent tracks of several bears and foxes, reached the ship in safety. About two hours after our return, we were all much astonished by the arrival of Mr. Court, and one of the party; from whom we learned that soon after they had left us they met with rough and heavily packed ice, which damaged the sledge. It was repaired; but subsequently became so broken, that they were rendered incapable of making any further advance, and encamped but a short distance from where we had parted with them. Messengers were at once dispatched to the ship with the intelligence, and orders to rejoin the party on the following morning with another sledge, and an additional man; as five were found insufficient for the work. The occurrence of the accident was a source of great regret, as it caused the delay of one day; very valuable at that season of the year.

Early on the following morning, the 22nd, they again started with a new sledge, accompanied by a fatigue party, in charge of Mr. Wynniatt, to rejoin Captain M'Clure. I much regretted that a slight accident which I met with on the previous day's journey, prevented me from accompanying them. They were provided on this occasion with a tent, a day's provisions, and other necessaries, in the probable event of their being unable to return to the ship that evening. As night closed in with a fresh breeze and snow-drift, lights were hoisted and rockets fired at intervals to

guide the travellers to the ship ; but they did not make their appearance until the following day towards noon. They informed us, that they reached the Captain's party the previous day about 2 P.M., that, having exchanged sledges and repaired the broken one, the former proceeded on their journey, and they retraced their steps. In consequence of the heavy snow-drift which had set in, they found their way considerably impeded, and ultimately lost the sledge-track of the morning. As the ship was not visible, and could not be reached without risk, the certainty of much labour and probability of casualties, they encamped on the in-shore ice for the night, which they passed as comfortably as circumstances would admit, and next morning had the pleasure of seeing the 'Investigator' distant only about four miles. They returned on board, having suffered only a few frost-bites.

No occurrence of interest took place for the next few days ; a party of men were employed in erecting a large cairn as a landmark on the summit of the larger of the Princess Royal Islands. I occupied myself for some days in examining and removing from these islands, specimens of their formation, and I can affirm that geologizing at a temperature from 15 to 20 degrees below zero, is not the most agreeable occupation.

On the 29th, some of our officers went on an excursion to Prince Albert's Land, where they fortunately met with a herd of five musk oxen. These animals

were proceeding southward, and the party having got them in a sort of dell, or ravine, took up a judicious position, and after a considerable expenditure of ammunition all fell but one—the leader of the herd, who had taken the post of honour in front, and received no less than seven balls before he dropped. This was, indeed, no less an unexpected than fortunate occurrence, and much too valuable a prize to be left on the land during the night, a prey to the tender mercies of any hungry animals that might be prowling about. It was accordingly determined that two of the party, Mr. Sainsbury, and the ice-mate, (both of whom had been frost-bitten, the latter very severely), should return to the ship with the intelligence, while the others, (Mr. Paine, the interpreter, and a marine), remained to guard their prize. As driftwood was abundant, they kindled a fire in a sheltered situation.

On receipt of the intelligence, Lieutenant Cresswell and Mr. Piers, (Assistant Surgeon), with three men, a sledge, tent, and provisions, were dispatched to the travellers on shore, to enable them to pass the night, as best they could in that dreary locality.

Early on the 30th, therefore, two fatigue parties in charge of the Boatswain and Carpenter, were dispatched to the bivouac, with additional sledges to assist in the removal of the animals; these we were all extremely anxious to see, as we had heard so much about them.

The morning being cloudy, and overcast with much

snow-drift, the land was quite shut out from view, and the non-appearance of the party after noon was a source of considerable anxiety. Two men were ordered to proceed towards the shore; but not to lose sight of the ship—they were provided with muskets to fire at intervals, in order to attract attention. Fortunately, however, the snow-drift having cleared away as the wind fell light, we were enabled to observe a dark speck at a considerable distance, wending its way through the rough ice, which left no doubt of the approach of the party. They soon arrived with three of the animals; one of the sledges having broken down with the remaining two was left on the ice, but was brought in afterwards.

The larger of the oxen we estimated at about six cwt.; from his apparent antiquity, he was leader of the herd. The graphic account given by the sportsmen of the position assumed by the dam and sire in front for the protection of the others, when brought to bay, was very interesting, and afforded strong proof of their affectionate instinct.

They consisted of three bulls, a cow, and a calf, and afforded us an aggregate weight of 1,269 lbs. of excellent meat, which proved a most welcome addition to our stock of provisions, coming as it did so opportunely at the commencement of winter.

As the weather was daily becoming colder, we were anxiously looking out for the return of the party from the northward, burned blue lights, and threw up

rockets nightly, to point out our position. On the morning of the 31st, about 8 o'clock we were astonished by the arrival of Captain M'Clure, unaccompanied by any of his party. He had separated from them the previous evening, some ten or twelve miles distant from the ship, with a view of getting on board before them, to announce their approach, and send out assistance, as they had suffered much on the journey; but darkness and snow-drift coming on, he lost his way, and with nothing but his travelling clothing on, withstood the rigour of the night.

Although no doubt could be entertained as to the existence of the Passage, from our previous observations, yet we hailed with great gladness, their entire confirmation on the return of Captain M'Clure. As no official announcement of it had been previously made, the present was considered a fit opportunity for doing so, and in these simple words our great Discovery was recorded in the ship's log.

"October 31st, the Captain returned at 9.30. A.M., and at 11.30. A.M., the remainder of the party having, upon the 26th instant, ascertained that the waters we are now in communicate with those of Barrow Strait, the north-eastern limit being in latitude $73^{\circ} 31'$, N. longitude $114^{\circ} 39'$, W. thus establishing the existence of a NORTH-WEST PASSAGE between the Atlantic and Pacific Oceans."

Thus was established the greatest Maritime Discovery of the age, which for three centuries had

baffled the skill, enterprize, and energy of the civilized world. It had been under the guidance and mercy of Providence, achieved by us, when in search of the expedition, that was lost in making the attempt to discover it. We could not therefore but experience an indescribable feeling of pride and pleasure, in knowing that through our single-handed efforts, additional lustre had thus been added to the hitherto auspicious reign of our most Gracious Sovereign, while the maritime greatness and glory of our country were still further elevated above all the nations of the earth; the solution of this great enigma leaving nothing undone to confirm Great Britain's Queen—Empress of the Sea.

On the evening of the 22nd, the exploring party advanced some three or four miles, after which they made daily about seventeen miles in a north-east course; this, making allowance for ice travelling could not be estimated at less than twenty miles, and thus they had advanced seventy-six miles. The general character of the ice was not materially different from that seen on the first day's journey; the young floes were numerous, of great extent, and afforded every ground for hope, that the 'Investigator' would pass through the Strait in safety, in the following year.

On the 26th, the travellers encamped on the extremity of a low point, the north-eastern termination of Banks' Land, from which arose high land, corresponding with the line laid down on the chart, as

seen by Sir E. Parry. They ascended to its summit, estimated at 600 feet high. This afforded them a commanding view of that expansive ice waste, known as Barrow Strait, but subsequently named Parry Sound, enabling them to see the bold outline of the land on which they stood, trending away to the north-west, and that of the opposite shore to the north-east, with no land intervening between their position and Melville Island, the loom of which they saw. Stupendous floes and heavily packed ice alone occupied that sea, which Parry had successfully navigated thirty years before. Thus fully verifying what we had observed from the top of Mount Adventure, on the 10th of October—conclusive and actual proof now lay before them.

I may here pause to pay a tribute of my admiration to the memory of the late Sir Edward Parry, the great and distinguished Pioneer of Arctic Discovery, who, although not the fortunate discoverer of that Passage he had so long and nobly sought for, it was through his undaunted perseverance, fortitude, energy and judgment exhibited in the great and extensive discoveries made by the successive expeditions under his command, that we were enabled to establish its existence. With our previous knowledge of the relative disposition of land and ice principally as regards Melville Island and Banks' Land, to the north, and Wollaston and Victoria Lands to the south, did we follow the course,

with a degree of confidence we could not otherwise have experienced, that led to our discovery. He it was, also, who first wintered with ships in the Arctic regions, and the admirable and no less original system of routine then adopted, with such excellent results, has been followed by all subsequent expeditions with but little improvement. Nor in connection with this subject can I pass over the name of that able, intrepid traveller, and distinguished philosopher, Sir John Richardson; who as the discoverer of Wollaston and Victoria Lands, the intimate friend and associate of the heroic Franklin in his earlier expeditions, had materially contributed to our success; for it was in the hope of reaching the former land that we stood to the eastward on first discovering Baring Island, which ultimately led us into the Strait of Prince of Wales. Surely then their names, no less from priority than great services, claim a first place in the page of Arctic History.

The hill where our travellers stood, and whence their observations were made, was appropriately named 'Mount Observation,' from the extensive view it afforded; and the expansion of the Strait at its termination was called 'Investigator Sound,' that the name of our ship might be perpetuated in those icy seas, she had hitherto navigated in safety. The points which flanked its entrance were respectively honoured with the names of Lord John Russell, and

the late Sir Robert Peel,* and are destined to remain in perpetual opposition to each other.

On Sunday the 27th, our intrepid party commenced their homeward journey, previously erecting a cairn on the site of their bivouac, in the centre of which was deposited a scroll containing an account of the discovery, the ship's name, position, &c. to guide, if possible, any travellers that might come along the coast, to a depôt of safety and succour. In the evening they encamped in the same position they had occupied on the previous Friday night; after which they took the former sledge track for their guide, and on Tuesday morning found themselves only forty-six miles distant from the ship, which they expected to reach the following night.

Accordingly on Wednesday the 30th, about 2 P.M. when about ten miles distant, Captain McClure left them in the hope of reaching the ship to announce their coming, and have prepared for them the first hot meal they would have eaten since their departure. Darkness, however, soon set in with a breeze and snow-drift, and unable to reach the ship, he continued wandering over the ice, suffering from fatigue and hunger for the remainder of the night. At one time he became so exhausted by cold and falling on the

* We were not then aware, nor for some years subsequently, of the death of this lamented and distinguished statesman.

rough ice, that he made a snow bed under the lee of a large hummock, where half sleeping and waking he remained until the atmosphere became clearer and displayed a star, which he immediately took as a guide and put himself once more in motion. When daylight came, he ascertained that he was to the south of the islands on the western shore about four miles from the ship; towards which, faint and weary, he wended his way. The party advanced, until, from similar causes, finding they could not with any degree of certainty make out the position of the ship, they encamped about seven miles from us, and burned several blue lights, which from the distance and the presence of snow-drift, could not be seen by us; but on the arrival of the Captain, a fatigue party under Mr. Wynniatt was at once dispatched to their assistance. At 11.30 we all assembled on the ice, and with three hearty cheers followed by warm congratulations, we welcomed their return.

The circumstances under which this journey was performed were such as well tested the energy, physical powers and capability of endurance of those engaged in it in an extreme degree. Travelling in the Arctic regions at such an advanced period of the year, was previously unknown. It became, however, a matter of vital importance in consideration of the critical position in which we were placed, and in furtherance of the object of the expedition, that our exact situation should be ascertained previous to the ice breaking up in the

coming season, that our spring campaign might be undertaken in accordance with the nature of our position. The low altitude of the sun, causing a daily decrease in temperature, with only about eight hours' daylight, was calculated to increase the difficulties of ice travelling to a degree the experienced only can imagine.

The travellers generally commenced their journey at 7.30, having previously taken what was denominated breakfast—a little cocon mixed with tepid water, (the fuel, spirits of wine, not being sufficient to boil it). At 1 P.M. they halted, when they took their grog, and about 5.30 encamped. Then came a difficulty, from the fact of the buffalo robes, blanket sleeping bags, and tarpaulin, being so hard and frozen that on pitching the tent they could not be spread, and thawing could be produced only by the entire party laying on, and imparting to them that warmth from their bodies, which they could so badly spare; thus, after passing a few hours in this way, their only protection from the rigour of the cold could be made available. Sleep was disturbed, and rendered but little refreshing, by the cold produced by their half frozen garments, at a temperature varying from seven to fifteen degrees below zero. The small consumption of food during the journey was quite wonderful; it amounted only to eighteen pounds of pemmican, thirty-one pounds of biscuit, and eight pounds of oatmeal; the period of travelling was nine days three

hours, and instead of there being a decrease of weight from this consumption, the contents of the sledge actually weighed one hundred pounds more than when they started, from the accumulation of ice on the blankets, tents, coverings, &c., caused by the vapour emanating from their bodies, being rapidly converted into frost, and deposited on everything around. The want of water was most severely felt, as melting the ice generally entailed loss of time; and the quantity of fuel taken proving much too small, the water was consequently limited; but all united in saying that any sacrifice would willingly have been made for the smallest quantity, when thirst was so intense. To the want, therefore, of this luxury may be attributed the inability of the travellers to eat, as thirst was always an accompaniment and early sign of the exhaustion ever present after their day of laborious exertion.

The pemmican* was not relished from their being obliged to eat it cold, which increased the thirst.

* The pemmican prepared for Sir J. Richardson's expedition was made at the Clarence Victualling Yard, as follows: the meat from which the fat and membranous parts were pared away, and cut in pieces, is dried on a malt-kiln over a slow fire until its moisture was entirely dissipated, and the fibre of the meat became friable; it was then ground in a malt-mill, when it resembled finely-grated meat; being next mixed with nearly an equal weight of melted beef suet or lard, the preparation of plain pemmican was complete.—*Richardson's Boat Voyage*. In the north, reindeer and buffalo flesh is substituted for beef, and mixed with a third of its weight of fat.—*Author*.

It was consequently but sparsely eaten—not, however, from any dislike to this food. Previous to their starting, I recommended that oatmeal should be taken, and given to the men with a little water when thirsty; this I had elsewhere seen practised with good effects, and though but an indifferent substitute for pemmican, it was not only taken in the water but in the coon. It was found to support strength, in addition to which it was much relished, and afterwards highly spoken of as an article of diet on such service. Their privations almost entirely arose from the quantity of fuel being inadequate to their wants. They had all lost considerably in flesh, and were more or less frost-bitten, but no other casualties occurred. Although the result of this journey had been anticipated, we hailed it with the greatest satisfaction, and the perseverance, energy and zeal with which it was performed, must ever redound to the credit of Captain McClure and all engaged in it.

On the 1st of November, the thickness of young ice was found to be twenty inches: preparations were made for finally closing in for the winter, the temperature between decks at night having fallen to 7°—the hatches were closed and the usual housing placed over the ship. A bed of snow about sixteen inches deep was laid on the upper deck, over which a macadamized covering of sand and gravel was spread, and an embankment of snow about eight feet was built around the ship; both of which con-

tributed largely to maintain warmth in the interior. Ventilation was the next subject which required our attention, and we adopted the principle, I believe, first proposed and acted on by the late Captain Owen Stanley, when Lieutenant of H.M.S. 'Terror,' in a former expedition; for simplicity and efficacy it is deserving great praise, as nothing better could be adopted with the resources at our command. It consisted of copper tubes from ten to sixteen inches in diameter, passing through the deck, from the top of which canvas funnels were attached, and conducted through the housing cloth to the open air, to the height of about fifteen feet. These promoted a good draught and the free escape of the foul air generated below, as was evidenced in the dense volume of vapour which ever issued from their tops. By this means and from the fact of the men having been kept off the lower deck for so many hours of the day, the air between decks was rendered much more salubrious and conducive to health and comfort, than it would otherwise have been; notwithstanding our best efforts, it was humid and impure, from the rapidity with which the vapour that could not escape was condensed by the coldness of the deck. But on this principle of ventilation, should ships be prepared for wintering in the Arctic Regions; it admits, however, of very considerable improvement, and would have been rendered much more perfect with a larger allowance of coals, and an additional

stove on the lower deck, which would not only prevent in a great degree the condensation of vapour and consequent humidity of atmosphere, but facilitate the escape of impure air, and contribute to the general warmth, dryness and salubrity of the ship.

Fires were about this time lighted, which included Sylvester's stove for the general warmth of the ship, a small stove in the Sick Bay, in which seven pounds of coals were daily consumed; one in the officers' mess-room, where from eight to twelve pounds of coals were burned, (the latter only in the depth of winter), and one in the captain's cabin, for which sixteen pounds were daily issued—in addition to which there was the galley fire, or the lower deck for cooking throughout the day. From this it will be seen, our fires could not have been of a very extravagant character, and the value of fuel in the Arctic Regions may be duly estimated.

A school was, at the same time, established for the instruction of the men in reading, writing, and arithmetic, each evening on the lower deck, which was well attended, and proved an agreeable source of occupation to many.

For the few first days in November, we were variously employed—a road was formed to the Princess Royal Islands by levelling the ice, and marked with poles, as guides; the cairn was completed, and on the 6th, when making my last visit to them with a sledge party, for the purpose of removing the geological

specimens collected, we were on our return caught in a snow-storm with a heavy gale from the south-west, which obliterated any trace to guide our return, and shut the ship out from view. Guns, however, were fired at intervals, to direct us towards her, some alarm having been felt at our absence. The increasing intensity of the cold rendered us almost incapable of facing the high wind; and the consequence was, that the repeated exposure of the hands to restore animation to the face, caused the former to become also frost-bitten. My right hand was so severely bitten, and the mischief spread with so much rapidity, that on reaching the ship, it was a stiff, frozen mass. I had not the slightest ability to bend it, and, on plunging it into a basin of cold water, a thin film of ice formed on the surface. I lost the use of it for a period of two months, and was, for a time, apprehensive of its safety.

On the 11th of November, the Sun took his departure—the day was beautifully clear and serene, one of the few fine days we had lately had, as the weather had been, for the most part, very tempestuous. There was scarcely a breath of wind, and the temperature had fallen to 26° below zero. When the last glimpse of the sun was revealed to us as he reached his meridian, he displayed in gorgeous splendour on the margin of the southern horizon, a segment of his upper limb, and as if to add greater effect to this, his last appearance in these dreary solitudes, his rays were

most truthfully reflected on the western sky, from whence, shedding their prismatic tints on the land beneath, he imparted an appearance of rare beauty to the scene, where stillness and solitude alone prevailed. Thus commenced the long Polar night of dreariness and gloom.

Everything at this time wore a truly wintry aspect ; snow had fallen in considerable quantities, and nothing but a uniform white surface met the eye wherever it wandered. The ship was completely embedded in it, and appeared as if she could never move again. A death-like stillness reigned around, which it was delightful to hear interrupted by the sound of a voice or the tread of a footstep, on the frozen surface of the snow. The slightest incident was gladly seized on as a subject of conversation and comment ; and thankful did we feel for the agreeable excitement afforded by the occasional visit of a Raven,* the capture of a Fox, the pale bright light of the moon, with occasional parasellenæ, the brilliant splendour of the Aurora, the constant presence of stars, or the meteoric flash of aërolites.

It was surprising with what readiness men accom-

F. * We were visited almost daily by two Ravens, which crossed the Strait from west to east, and returned again in a few hours, but before the close of winter one only was observed ; and early in the spring, when visiting the Western Land, found the wing-feathers of our missing friend, which had, no doubt, become the prey of a Fox.

modated themselves to a mode of life, strange and novel to the majority of them, and how readily they turned every event to good account. It is on such service, that fertility of resource is ever advantageous—a fertility that great author of invention—Necessity, never fails to bring into play. It was really astonishing to witness the number of tradesmen that were to be seen at night, on our lower deck, all actively engaged at their respective pursuits; tailors, bootmakers, and knitters: a great variety of needlework, everything, in fact, that a needle is capable of doing, was, at least, attempted; and it was no less laudable than strange to observe the progress which ingenuity, and industry enabled them to make, and the degree of perfection which they ultimately attained, as they were, I may say, all self-taught. Nor was reading, and improvement of the mind generally forgotten; for while thus engaged at work in groups, they generally had the best scholar (as he was termed,) engaged reading to them aloud. Thus were the evenings passed—the day being occupied in exercise, and the light duties they were occasionally called on to perform.

We had happily entered on the winter in good health and spirits, and prepared to await with patience until daylight should again return, and the season of active operations should commence. The weather throughout the entire of November was for the most part boisterous. Northerly winds prevailed, and the

temperature ranged from zero to 32° above it ; showing a mean for the month of $-10^{\circ} 2'$, that of the lower-deck 48° F. and height of marine barometer 29.789 in.

December was ushered in with a north-westerly gale, and heavy snow-drift ; the thickness of the ice had increased $10\frac{1}{2}$ inches, being found to be 2 ft. $6\frac{1}{2}$ inches. No incidents of consequence occurred to render it in any degree more marked, if I except the capture of a few foxes in our traps, which afforded us the rare, exciting sport of a hunt, after a fashion of our own. The little captive was "unearthed" from its trap on a large neighbouring floe, where we formed a circle some 200 or 300 yards in diameter, to prevent its escape, when pursued by a little Esquimaux Dog we had brought from the coast of North America, and which we had, for the occasion, raised to the dignity of a foxhound. The chase invariably proved amusing, and never failed to afford us a pleasing degree of excitement, as long as the cold enabled us to remain spectators ; but, indeed, nothing fails to prove exciting to men under such circumstances, trifling as it may be.

The winter solstice, at length, came—an important epoch in our calendar, as we were aware from this period, that the sun was again on his way towards us, and that one half of the season of darkness had then been passed.

The advent of Christmas was cheerfully welcomed. Our best efforts were bestowed to make it pass with

as much hilarity as circumstances, and our own resources, could admit of. Our larders were ransacked for the choicest dainties; and, amongst the rarities produced, were beef six months old, which had been nearly all that period frozen, and a sirloin of musk ox, which would have ornamented any table in a more temperate clime. Many an anxious, longing thought was bestowed on our far distant homes; many a prayer was breathed and hope expressed that, if spared to see another Christmas, and freed from the perils of our position in the pack, it might be spent far without the limit of the Arctic circle. Thus passed our first Christmas in the ice, which we had so sanguinely hoped would be our last; but how little did we then foresee what the future had in store for us!

On the 28th, we were favoured with a hasty visit from a Seal, which made his appearance in the fire-hole*—doubtless glad of the opportunity it afforded him of freely inhaling the air. These animals have the power of keeping open throughout the winter a small orifice in the ice for respiratory purposes, over which an Esquimaux will frequently sit for hours in the hope of capturing them.

The weather throughout the entire of this gloomy

* This is a small space of water about two feet square, kept open throughout the winter by removing the young ice as it forms every hour, so as to ensure a supply of water in the event of fire.

December differed but little from the previous month ; but the cold was considerably greater, having ranged from 3° to 39° below zero, with a mean of $-23^{\circ} 36'$, that of the lower deck $45^{\circ} 4'$, and the force of wind 2 4N.

The last days of this eventful year closed on us, presenting a picture of wildness it is difficult to conceive. A heavy, north-westerly gale and dense snow-drift confined us to the ship ; and thankful were we for such comfortable shelter from the pitiless blast that swept over us—to which we could not for an instant expose ourselves with safety.

CHAPTER XII.

The First Day of 1851—Our Health and Efficiency—Inspection of Crew—Thickness of Ice—Reindeer seen and pursued—Temperature of the Month—Return of the Haven—Re-appearance of the Sun—A Wolf and Incidents—Effects of Sun's Rays on Ice—First Spring Operations—A Fox—A Hare killed—A Bear seen and Pursuit—Visit to the Western Land—Baring Island and Incidents—Appearance of Land—Removal of Snow Embankment—Temperature of the Month—Survey of Provisions—Sudden rise of Temperature—Preparations for Travelling—Despatch of Searching Parties—Their Direction—Importance of Visiting Melville Island—Captain Austin's Expedition—Pursuit of a Bear—Snow Bunting—A Seal killed—Report of Game on the Land—Return of Mr. Wynniatt and his subsequent departure—Shooting Parties—An Incident of Sport—Success in the Chase—A Bear shot—Incidents and Events.

THE year 1851 was ushered in with a continuance of the gale with which the preceding one had closed. It raged with unabated fury, heightened by heavy squalls, at intervals, dense snow-drift, and all the concomitants of a northerly gale; these, with the prevailing gloom and darkness, made the prospect more than sufficiently dismal. It was on such occasions we were forcibly reminded of the probable condition of those of

whom we were in search, and how vain must be all human powers of endurance, opposed to the rigour of the elements—such as we had experienced for the few previous days—from which we scarcely found sufficient protection in the best appliances of art. We could only hope a better fate had befallen them than our fears led us to predict. The year, in other respects, dawned on us auspiciously. We were in good health and spirits, with only one or two men on the sick list, and otherwise in a state of efficiency highly gratifying.

From this period, I adopted the custom of inspecting the ship's company on the first day of every month, to ascertain the first appearance of scurvy, or the existence of other causes of disease; that early precautionary means might be had recourse to, to maintain our general efficiency. From the admirable results which attended this practice, I would strongly recommend it to be regularly carried out in all ships employed on similar service; as it enables the Medical Officer not only to combat disease with more success at its onset, but affords the positive evidence of the actual state of health of every man on-board.

We had on this day a repetition of the hilarities of Christmas, and indulged in such delicacies as I am sure our friends at home could not have imagined, as having been within our reach in these inhospitable regions.

We found the ice had increased thirteen inches and a half in the course of the month, affording a mean

thickness of three feet eight inches. On the 3rd, the gale abated, having left a bank of snow drift accumulated about the ship to the depth of thirteen feet; and we were delighted to be released from the confinement caused by its continuance. On the 6th, one of our men, (John Ames,) the sick bay attendant, in the course of his perambulations over the ice, saw three Reindeer about a mile and a half from the ship, apparently coming from the Western shore. Darkness enabled him to approach within twenty yards, but on seeing him, they trotted off in the direction of the Princess Royal Islands. No less astonished than affrighted at what he had observed, he hurried on board to inform me, and brought with him unmistakable proof of his truth. The intelligence was most cheering to us all, as it verified the opinion we had previously entertained that these animals were never absent from either shore during the winter. This was rendered more remarkable, no records existing of Deer having been seen in corresponding latitudes at this season of the year, as it was generally believed, that they migrated to the southward on the approach of winter; which this and subsequent experience enabled us to refute. An early dinner off venison was predicted; and arms and ammunition underwent a complete overhauling for the remainder of the evening.

The morning of the 7th was dark and cloudy, with snow falling. It was determined to follow the track

of the Deer as well as darkness would allow. Accordingly, Captain M^cClure and myself left the ship at 9.30 A.M., there being a gleam of light sufficient to enable us to see our way, with a temperature of 30° below zero; and we proceeded in the direction of the islands. After innumerable falls while clambering over rough ice, we reached the locality, but failed to discover any trace of the Deer, they probably having gone to the opposite side of the Strait. However, as no doubt existed of their having been here—their tracks being still visible on the floe ice—it raised hopes amongst us of early sport in the coming season. We had some difficulty in regaining the ship, her dark outline being shut out from view; and were afforded ample evidence that the season was not yet sufficiently advanced to make lengthened excursions. The sight of a solitary Ptarmigan, however, recompensed us for the journey, and enabled us to return with some agreeable intelligence.

Towards the middle of January there was a perceptible increase in the amount of light at noon, and the stars appeared less brilliant, which indicated the approach of the sun. Each successive day appeared a counterpart of the preceding, having the same daily system of routine. More frequent excursions were made to the islands, since the appearance of the Deer, in the hope of meeting them; and trifling as the incidents were which attended these journeys, they compensated us in some degree for our

want of sport, by the agreeable excitement which attended their occurrence or narration. On the 12th, Mercury froze in the thermometer for the first time, the temperature having fallen to 45° below zero, or 77° below freezing point of Fahrenheit, and two days subsequently to 83° , but it did not exercise the same influence on our spirits, which were still buoyantly rising with an advancing season. The beautiful pale light of the moon, with an occasional halo and parasellenæ, and in her absence, the Aurora Borealis, tended to disperse some of the gloom of winter. The latter was not so brilliant as we had seen it at an earlier period of the season, in October and November—probably from there being less moisture in the atmosphere. On the 30th we were gladdened by the re-appearance of our Raven, which for some days had been absent, and we feared that he might have shared the fate of his mate, who had ceased to visit us for a considerable time. I cannot describe the degree of interest with which we watched for this daily visitor, and his return was regarded as an important event.

January well maintained its character as a cold winter month; the latter part was intensely so. Frost-bites were frequent and severe, on the slightest imprudent exposure, which entailed the necessity of covering the face; and frequent high winds, rendered us at times quite unable to leave the shelter of the housing. The daily average for the month was $82^{\circ} 50'$ below zero—nearly 10° lower than that of the preceding month.

Towards noon, on the 3rd of February, the appearance of a rich golden tinted sky, forcing its way through a dense bank of haze, which hung over the summit of the western hills, at once assured us of the proximity of the sun; and at noon our hearts were gladdened by his presence, as he lighted up the dreary regions that had been eighty-three days in darkness. It was delightfully exhilarating to observe the reflection of his rays as they found their way through the chance openings of our housing; and equally so, to observe our own shadows on the snow covered waste around us. We hailed his return as an important epoch, hoping never again to lose him for so long a period; and congratulated ourselves that the darkness of an Arctic winter had nearly passed. The ice was found to have increased $13\frac{1}{2}$ inches during the month.

On the 7th, some of our men, who had gone to the islands, were on their return followed by a Wolf, the first that had been seen; they thought from his audacity in approaching within twenty yards, that his intentions were not honourable; so, having no fire-arms, they ran, and the wolf ran; when they stood a little to watch him, he stood—and in this way they at length reached the ship in a state of great consternation, still followed by the Wolf. This was, indeed, glorious news, so we sallied out with guns and boarding pikes, either for pursuit or attack; but we failed, by the non-exercise of proper strategic

skill, as he made a hasty retreat. Such a visitor, however, was not to be so easily disposed of, and we remained anxiously watching for his return. In the meantime our little Esquimaux dog, having found her way out on the ice, enticed the wolf from beneath a neighbouring hummock where he lay concealed. He came up in the most playful manner, and like one of her own species caressed and played with her for some time; at last both started off together, and we gave our favourite little pet up for lost. She, however, again made her appearance, followed by the Wolf close to the ship. We then made a line fast round her neck, and again sent her out, that in the event of danger we might haul her on board. This had the desired effect of bringing forth the Wolf, but we never could get him in a sufficiently good position for a shot. He remained about the ship for the next few days; eluding, however, all our best efforts to get a shot at him—yet it was an event which afforded us much pleasurable excitement.

As the sun increased his altitude, "Parhelias" were frequent and more beautiful than at any other period of the year. It was quite delightful to see the effect of light and shade once more, as his rays fell on the pinnacled and rugged surface of the pack. We could not but contrast the cheerfulness imparted by his presence on the dreary ice waste, with its aspect during the period of his absence. But he shines a long time before his effect becomes manifest on such ice

in such a temperature ; indeed I have frequently had one side of my face partially warmed by his rays when the opposite was frost-bitten, and required constant friction to restore its vitality. The first visit was paid to the eastern shore on the 24th, unattended by any incident ; and from this time our excursions to it were frequent, having several hours daylight. The cold of this month much exceeded what we had previously experienced, having varied from 9° to 51° below zero, with a daily mean of $-37^{\circ} 47'$ exceeding that of January by five degrees. The weather was more clear and serene—the usual accompaniment of a very low degree of cold.

March was gladly welcomed, and as the days lengthened, afforded us time for more extensive excursions, and enabled the men to enjoy themselves at out-door sport and games on the ice. My inspection of the crew this month was very satisfactory ; although somewhat blanched from the absence of daylight between decks, they afforded most pleasing evidence of being in a high state of efficiency, and equal to the performance of any service.

On the 3rd, our first spring operations commenced, incidental to the departure of the travelling parties as soon as the season admitted of it. It was, therefore, determined as a preliminary step to form a depôt of provisions on Princess Royal Islands, to which a boat was added, and also one on the eastern land ; that in the very remote probability of a sudden disruption of the

ice, and injury or loss of the ship, we might have independent means at our disposal for transit to the coast of America, or elsewhere, as circumstances might render necessary. Accordingly the first whale boat, was, after great labour, conveyed on sledges in safety to the larger island ; after which the provisions were conveyed in the same manner (sufficient for sixty men for three months) and on the 10th, the labour was completed by placing a boat on the eastern land. A record was at the same time placed in the cairn which had been erected at the commencement of winter. While one day engaged with others in tracing out a road for its safe transit which we marked with empty meat tins, a small Fox, no doubt pressed and tamed by hunger, approached quite close to us to examine one of them, wherein he luckily found a piece of meat. He was observed by our little dog, who immediately gave chase, and after a short but very exciting race, in which we all joined, Reynard fell a prey to his temerity. These pretty little animals, from the effects of hunger, become so tame, that they were frequently caught in the traps on deck, having voluntarily come on board, and were more numerous, judging from the number of captures which were made, than at the beginning of the season. As a proof of the scarcity of their food, at this season of the year, I found the stomachs of some quite empty, with no trace of food having been lately taken—in others, there were small pieces of the dwarf willow, and

in one it was distended with the hair and portion of the hoof of a deer, which had in all probability fallen a prey to some hungry Wolf, and thus afforded it a scanty meal. A Hare was shot on the Eastern land on the 22nd—this was a great event, no less from its having been the first killed, than from the pleasing evidence it afforded us of the presence of such game.

On the 27th, we were cheered by the admission of daylight to our mess-room—the skylight having been exposed, for the first time for nearly six months ; and I need not say how welcome and acceptable it was to us all. An occurrence novel in itself, and no less agreeably interesting in its results, happened on the 29th. A party having gone to the islands, returned at noon and reported having seen a recent bear track, which put every one on the *qui vive*, anxiously watching for this expected visitor. About 4 P.M. to our great delight, Bruin was observed slowly emerging from the rough ice about 400 yards distant from the ship, when all manifested the greatest anxiety to obtain a sight of him—the majority for the first time—and our guns were at once in readiness for action. The dark appearance of the fox traps on the ice, had first attracted his attention. To them he proceeded, doubtless attracted by the smell of the bait, which must have agreeably assailed his keen scent ; after tossing the trap about for some time, and finding all efforts vain to obtain the modicum of meat it contained, he wandered to and fro—evidently fearful

to approach near the ship. His presence added to the wild and dreary aspect of this icy region, which the existence of a gale tended much to heighten, as the snow-drift was borne in dense clouds on the wings of a biting blast. A few of us cautiously sallied forth for the attack; just as we had got within range, and were shut out from view by a lofty hummock, our approach over the frozen snow aroused him to a sense of his danger, and off he started, much to our chagrin. To have followed him would have been quite futile, and we returned on board smartly frost-bitten from our short exposure. He again made his appearance, but set at defiance all our efforts to get a shot. The visit proved a welcome one, affording us as usual an agreeable topic of conversation; and as he had come from the south, we assumed that he was then on his annual migratory tour to the more distant regions of the north. The appearance of the ship, we hoped, would prove sufficiently attractive to induce many others to visit us.

On the 31st of March, Captain McClure, Lieutenant Crosswell, and myself, proceeded to the western land, (Baring's), it never having been visited since we took possession of its southern extreme, when first discovered. We reached it after a pleasant exciting walk of nearly three hours over the ice; the day cold and clear, with a temperature of 31° below zero. The first objects that met our view, were the tracks of a wolf, and numerous foxes, and recent appearances

of the slaughter of a Hare—every particle of flesh and bone must have been devoured, as the only remnant we discovered, was a little of its soft, white, downy covering, and a few drops of blood staining the snow; strong proof of the ravenous hunger which exists amongst these Foxes towards the close of the long, dreary winter. A little further on we found a portion of a raven's wing; doubtless, that of our former visitor, whose absence we had so much regretted.

We proceeded directly inland, for some miles; the general aspect everywhere presented the same character of Arctic barrenness and sterility as on the eastern side; but was more generally bold and lofty in its outline, and the land more elevated. Cliffs, from 80 to 120 feet high, rose here and there abruptly from the beach, presenting a bold and almost precipitous escarpment, skirted by deep ravines and valleys extending irregularly and tortuously into the interior, and ultimately losing their character as the land became low and undulating. We observed, however, in some parts of their course, that the hills on either side were lofty, and in some places nearly vertical, rising to a height from 200 to 300 feet. Those having an eastern aspect, had their escarpment formed of a hard frozen snow, contrasting forcibly with the denuded wild appearance presented by those with a western front, which evidenced that the prevailing winds were from the latter quarter.

The soil was composed of a scoriaceous admixture,

with large stones and boulders plentifully strewn over its surface; the latter had a uniform covering of granitic, quartzose, clay-slate, and other pebbles, hard frozen in the soil, with a few scanty tufts of withered grass interspersed throughout. In the valleys, Nature appeared to be more lavish of her gifts; they were favoured by the shelter afforded by the neighbouring hills, and the deposition of alluvium born down from the heights, by the melting of the summer's snow.

The numerous detached patches of low, stunted, and withered grass, and tufts of moss, peering through the snow, were, however, the only appearance of more luxuriant verdure that could be observed; they furnish the only sustenance which can be obtained by the reindeer, hare, and other small rodents, during the season of dearth and darkness.

On our return to the ship in the evening, we had the pleasure of seeing her dark hull again exposed to view—the deep snow embankment which concealed it having been removed during our absence—and thus unrobed, she presented a pleasing contrast to the white surface around.

An event of no less importance in Spring operations took place on the following day—the removal of the snow from the upper deck. It was wonderful to see what an altered appearance everything presented on board; pleasing and agreeable was it, indeed, to all, to walk the plank again, and receive, between decks,

the light of day, from which they had been so long excluded.

The last of the very cold winter months had come to an end, and gladly did we hail all the agreeable events which attended its close, evidencing the advent of a more genial season, and the commencement of active operations. The mean temperature $-28^{\circ} 5'$ was higher by 8° than that of the preceding month, although the range differed but little—from 5° to 51° below zero. Cold westerly and north-westerly winds had generally prevailed.

April had, at length, come, and found us in a high state of efficiency, which from this period was fully tested. The ice was found to have increased $9\frac{1}{2}$ inches, and was then 6 feet 5 inches thick. The first work commenced, was to ascertain the exact quantity, state and condition of the provisions on board, that we might be fully aware of the extent of our resources, and dependent as we were entirely on ourselves, it was a very necessary measure of precaution. The holds were accordingly cleared out, and light and air admitted; this tended much to their purification, and then the contents were returned.

On the 3rd of April, during the prevalence of a south-easterly gale, the temperature rose in the course of four and twenty hours from 30° below zero to 6° above it, but the following day was as low as before; a wonderful change in such a period. The continuance of the gale had brought up the warmer air

from the southward—a circumstance which, on several occasions, occurred in subsequent years, generally at this season.

The ship having suffered more or less from the effects of pressure in the previous season, was caulked throughout, that we might be better prepared to encounter the enemy in the coming one.

Until the middle of the month we thus continued variously employed—the travelling parties having been told off, were engaged in preparing their sledges and general equipment to start on their respective routes, as soon as the weather admitted. The neighbouring lands were frequently visited and explored, in search of game; but our efforts, hitherto had been unrewarded—the occasional sight of a Ptarmigan, alone compensating us for many a weary and toilsome march over the ice and snow. They, however, answered one good purpose, that they were the means of bringing us into good working condition, and better prepared us for subsequent exertion in the chase.

On the 14th, it blew fresh from north-east, subsequently changing to the southward; then the temperature again underwent a change similar to that noticed on the 3rd; on the 17th it rose 6° above freezing point, when a partial thaw set in, which was to us quite unexpected. It was, therefore, determined, should it continue for another day, to start the travelling parties; the sledges (three in number,) were

accordingly packed in the evening, and dragged out for a short distance, preparatory to their departure.

On Good Friday, the 18th, the temperature had fallen to 25° at noon, and continued doing so slowly for the remainder of the day; and, as had been previously determined on, the travelling parties were dispatched in the evening at 7.30 P.M. I may here remark that ice travelling at this season of the year is performed during the night, the persistence of daylight enabling them to proceed, the warmer hours of the day being devoted to rest; and the exhausting effects and blindness produced by the combined action of snow and sunshine are thereby obviated.

Each party consisted of one officer and six men, with a sledge provided with food, fuel, and clothing for forty days; the aggregate weight of which amounted to 1028 pounds. That under the command of Lieutenant Haswell was ordered to proceed along the south-eastern coast of Prince Albert's Land, continuous with that of Wollaston previously discovered. That of Mr. Wynniatt proceeded along the north-western coast of this land to search the southern shores of Barrow's Strait towards Cape Walker; and Lieutenant Cresswell, with his party, took the north-western coast of Banks' Land. They left us with three hearty cheers for their safety and success, full of hopes and in high spirits. Each were accompanied for some distance by a fatigue party; and I went in charge of that which attended the northern travellers.

I find in the pages of my journal, written at that time, expressions of deep regret, which an impartial discharge of the duty, I have undertaken, compels me to notice, viz., that we did not then send one of these detachments to Melville Island, for reasons too obvious almost to require any explanation. Had one party only left the 'Investigator' instead of three, it should undoubtedly have been sent to this far-famed locality, from the southern extreme of which we were distant little more than 100 miles. We were aware that a well-equipped and efficient expedition of four ships, under command of Captain Austin, had left England to prosecute the search by Barrow's Strait; the great and primary object of which was to reach Melville Island—much dissatisfaction and disappointment having been experienced in England that Sir James Ross had failed in doing so the previous year. It was, therefore, a matter of the most vital importance to connect our Expedition with that of Captain Austin—thus completing the circuit of search from either side of the American continent—to make that officer aware of our position, that we might be able to afford each other mutual succour and support, and that the efforts of search might be directed elsewhere; establishing a combined principle of action, which is ever the first element of success. There could exist no doubt that if that able and energetic officer, (Captain Austin), did not reach Melville Island in his ship, his first efforts would be made in that

direction; this, as we subsequently learned, he successfully accomplished, a party from his ship having deposited a record at the far-famed sandstone near Parry's winter quarters, where they would also have received intelligence of our position, had we had the good fortune to have done the same. With the knowledge of our position, this officer never would have left the Polar Sea in 1851, but would doubtless have despatched intelligence of it to England that year; this would have prevented the necessity of the expedition of Sir Edward Belcher being sent in search of us, when anxiety was felt for our safety; and by his neglecting a course which wisdom and foresight should have dictated, did we undergo subsequent years of hardship, privation and suffering.

There was another reason of even greater import—in the event of Franklin having gone up Wellington Channel as was then very generally supposed, and being obliged to abandon his ships to the northward or westward, nothing was more probable than that he would endeavour to reach the locality where Perry had spent a winter in the hope of meeting with succour—in accordance with the opinions entertained, as proved by the great efforts made to reach it—where it might be expected tidings of him would have been heard. But I am consoled by the reflection that neither he nor his gallant band were then depending on us, amid its dreary wilds, for relief. Our south-eastern party could have been made available for

this service ; for it was only in a geographical point of view that any results were expected, as we were fully aware that the duty of searching its southern and south-eastern coast was, at that time, being performed by Mr. Rac, of the Hudson's Bay Company's Service. It is needless to dwell further on this subject. I adduce it, not for the purpose of exposing an error which adds nothing to our credit, but that its repetition may be avoided, as well as to show that a combined plan of action should ever exist among Polar Expeditions, and that all personal considerations should be cheerfully cast aside to promote the object of the service on which their country sends them forth.

Immediately after the departure of our travelling parties, the weather assumed an unfavourable aspect, became foggy, with a heavy gale from the north-west. The temperature at the same time fell : we became anxious about the northern parties, as we feared they might be compelled to return ; but, fortunately, the gale ceased in the course of a couple of days with every prospect of finer weather. As there was but little to be done in the way of work, our exertions were devoted to the chase. Long and frequent excursions were made to either land ; on one occasion, we discovered the remains of an Esquimaux hut on Prince Albert's Land, also a piece of a sledge, and some bones of seals and foxes—another proof of their having visited this coast. On the evening of the 28rd, when all was still about the ship, a large Bear was observed

slowly coming up from the southward, and stopped at about 150 yards: at this distance, he took up a position, gazing intently on the ship, and eagerly sniffing the air. We waited for a few minutes in hope of his approaching nearer; but possibly suspecting our intentions, he was proceeding on his course to the northward, when one of us fired, and it was thought, wounded him, as he fell on his knees, and staggered a little. He again started at a brisk pace, pursued by myself and a few others, when I fired and wounded him in the hind-quarters without arresting his progress. Not having time to reload, I pursued him with the bayonet, having taken the precaution of fixing one to my gun in the event of coming to close quarters; but, after a fruitless chase, he eventually made his escape. He was a noble-looking animal, the largest we had yet seen; and we consequently regretted that he had not fallen to our guns.

On the 27th, we hailed with pleasure the appearance of the first of the feathered tribe that had visited us—the hardy little Snow Bunting (*Emberiza Nivalis*) was seen chirping about; it is considered the certain harbinger of spring.

The few remaining days of this month were unmarked by any incident—they proved more boisterous than any of the preceding—the force of the wind having averaged 3·1, and were generally cold for the season, the temperature ranging from 38° above, to

32° below zero, with a mean of —4° 78'. Much snow fell, which I remarked was beautifully crystallized, some instollated, others in a pennated, hexagonal form, larger than was generally observed during the winter months of intense cold.

On the 1st of May, we found the solid ice to be six feet eleven inches—showing an addition during the month of six inches, a diminution of more than a third from that of last month; and as it did not subsequently increase, the winter's ice may be estimated at seven feet in thickness. A Seal made his appearance in the fire hole on the 2nd, with less impunity than our former visitors, for being observed by the Quartermaster, who was standing close to it, he seized a boarding pike, and with much adroitness passed it through his skull, fixing it to the ice until assistance arrived, when he became our captive. On examining it, I found the remains of numerous old wounds in his skin; as the males fight much amongst themselves at certain periods, he had doubtless got them in combat with his fellows. There was nothing of him lost; the skin and skeleton were preserved for specimens, the blubber was kept for the dog, and the flesh was eaten, and was considered by no means unpalatable.

On the 5th, our efforts in the chase were, at length, crowned with a cheering amount of success; a party having gone to the western land, returned in the evening with four Hares and three Ptarmigans, afford-

ing us pleasing evidence of the existence of game on this land, where we had hitherto looked for it so often in vain. They had gone further inland than any who had previously visited it, and delighted us with the account they gave of the number of hares which had been seen, in groups of six and seven, wonderfully tame, allowing them to approach near without manifesting any alarm. They also observed numerous bones of quadrupeds strewn about, Reindeer and Musk Oxen; several skulls of the latter were partially imbedded in the soil, and one or two of them were brought on board. On receipt of this intelligence, it was determined to send the following day a shooting party to either land, with tents, provisions, &c., for a week, to be relieved then by others—so that every advantage might be taken of the favourable opportunity of procuring fresh supplies; for however small in quantity, it could not but prove acceptable.

At 1 o'clock on the 6th, our slumber was disturbed by the Quartermaster of the watch, reporting, to our amazement, that a figure was approaching the ship from the northward, which he thought was Mr. Wynniatt, and soon afterwards the nearer approach of this officer fully verified the fact; at the same time his party with the sledge were observed some distance in the rear, emerging from the rough ice that skirted the neighbouring floe. The intelligence had brought all immediately on deck, and a party was at once despatched towards them. From Mr. Wynniatt's account

no accident to himself, or any of his party had been the cause of his return ; but a fall on the ice, nine days after leaving the ship, had so damaged his chronometer as to render it entirely unfit for use ; and being unprovided with a watch, he was unable to take observations to determine his longitude. He, in consequence, deemed it prudent to retrace his steps—that provided with another he might start again, and fulfil the tenor of his instructions. There was not an available pocket chronometer on board, but it was determined to dispatch them again that evening in the same direction with thirty days' provisions. According at 6 P.M. the two shooting parties for either land, and that of Mr. Wynniatt—both fully equipped for their respective services, which had given us a pleasing amount of exciting work during the day—were drawn up on the ice, and took their departure with the never failing three cheers. I took charge of a fatigue party as large as we could afford to accompany and assist Mr. Wynniatt some distance to the northward. The weather looked favourable ; temperature 3° with a light south-westerly breeze ; and we earnestly wished them better luck.

On the 7th, a small party of four left the ship for the western shore, to visit and have a day's sport (as they termed it) with that which had been dispatched thither the previous evening. Not returning, as we expected them, towards the close of the day, we assumed that the unfavorable change in the weather,

with a low temperature, high winds, and dense snow-drift, had induced them from prudential motives to take refuge for the night in the tent, which allayed the apprehension we should otherwise have entertained for their safety. On the 6th, the weather had undergone no change, except that the temperature had fallen several degrees below zero—notwithstanding the sun's altitude at this period, and the short time he was below the horizon, the low degree of cold and the high winds scarcely allowed us to be convinced of the advent of summer, despite the cheerful appearance which perpetual daylight imparts to these regions. About 8 A.M. three of the party, which had the day before left us, made their appearance on board; the fourth having been left on shore in the tent, had nearly perished under the following circumstances.

The unfortunate subject of the occurrence, William Whitfield, carpenter's mate, soon after they arrived, left the tent with others in pursuit of hares, which they had previously observed. When absent about an hour, they separated by mutual consent, but remained in sight of each other, until a heavy snow storm coming on they were lost to view. Whitfield, when distant from two of his companions about 160 yards, having been warm and perspiring from his previous efforts, felt himself become suddenly cold, was seized with headache and giddiness, and fell down insensible. This was unobserved by his companions, who soon sought the tent for shelter,

supposing that Whitfield had preceded, or would soon follow them. In a state of insensibility, he thus remained for, at least, two or three hours, until a slight degree of consciousness returned, when he made an effort to extricate himself from beneath the snowy covering which had accumulated during the prevalence of the storm. It failed, being unable to move his limbs, and he had likewise lost the power of utterance. He observed at no considerable distance some of the men, whom he knew were in pursuit of him, but was unable to attract their attention; and from being covered with snow, was unobserved. Happily, however, the efforts he made to free himself, produced some excitement of the heart's action, when he felt a glow of heat over his body, with returning power in his arms—his lower extremities remaining still cold and rigid. After a short time, he made an effort to crawl over the snow to regain the tent, but failed in doing so; he then obtained a view of the ice in the Strait, and slowly crawled towards the beach, which he fortunately reached. Having observed some traces of Musk Oxen, which they had passed in the morning, he recollected the course they had pursued to the tent, which was only some 400 or 500 yards distant, in a neighbouring ravine—thither he again crawled and most Providentially reached it.

The party in the tent had remained in a state of great anxiety as to his fate; they had made repeated efforts in search of him, exposed to all the fury of the raging

gale, and to the risk of losing their way in the dense snow-drift by which they were enshrouded. Opinions were divided in the council as to his fate, but the majority thought that in the eagerness of chase, he had been led far from the tent, and had returned to the ship. While this state of uncertainty existed, their attention was suddenly arrested by a noise outside, as if something slow and heavy in its movements was approaching. They thought it was the pad of a bear, the tracks of several having been observed close to the tent in the morning. They at once 'stood to their arms,' ready for attack or defence in the event of Bruin being the visitor. One of them then opened the tent very cautiously but saw nothing, and on venturing a step or two outside, to look around him, instead of a bear, the appalling spectacle of their missing companion met his view. The poor fellow had crawled within a couple of yards of the tent, when he was unable to proceed one step farther; he could not speak, his body rested on his hands and knees, the head thrown back, the eyes fixed and immoveable, the nose, mouth and ears filled with snow, which was fast accumulating about him; the jaws and limbs rigid. A few minutes more might probably have terminated his earthly career, when by the interposition of a merciful Providence, he was thus rescued from the jaws of death. He was immediately taken into the tent, and as the officer in charge of the party, (Mr. Sainsbury,) subsequently informed me, no

pulse could be felt at the wrist, a slight movement of the chest being the only indication of life. They set about to resuscitate the almost lifeless body, by means of warmth, friction and the judicious use of stimulants; and had the happiness of seeing their efforts ultimately attended with success. A party was immediately sent off to the ship with the intelligence, when we dispatched a party of four men in charge of Mr. Piers (Assistant Surgeon) which Mr. Ford (Carpenter) also accompanied, provided with a sledge and every requisite for his removal. On their reaching the tent, he had recovered the use of his faculties, but still suffered from the effects of exposure; he was, however, able to bear removal to the ship. This was carefully and safely effected under Mr. Piers' direction, and they arrived on board at 6 P.M. I then found the poor fellow much exhausted, suffering from the effects of reactionary fever and snow blindness; he was likewise extensively frost-bitten—from all which, he in due course recovered, but frequently told me he never after felt himself equal to the same amount of exertion. Such is one of the many incidents inseparable from Arctic sport, which all of us in a greater or less degree experienced during this and subsequent years; a hunting excursion not unfrequently entailing the necessity of walking for one's life.

A Snow Owl (*Strix Nyctea*) was seen in the evening for the first time, and pursued in vain, as we

ever found it difficult to approach these watchful birds. Several Bears had been observed by the party returning from the shore, going northward; and two Deer had been also seen on the land for the first time, which we hailed as cheering news.

On Sunday morning the 11th, the shooting parties returned, bringing with them three Hares and twenty Ptarmigan, which were equally distributed. Our own efforts during the week having added somewhat to the number, we indulged in fresh game for the first time since the bounteous supply of Musk Oxen had ceased during the winter. In the evening, fresh parties were again dispatched to pursue the hunting for a week.

On the 12th, we had unusual good fortune in our captures. A Fox had been taken in one of the traps—a Bear had been pursued by us at an early hour in the morning, but escaped. A party of four men, however, who had gone on an excursion to the island, were more fortunate—two of them having separated, suddenly came on a Bear lying apparently asleep at the base of a large hummock, where he had but lately killed and eaten a Seal. They, at once, signaled to the others to close quickly, and had no sooner done so, than, roused from his lethargy, he boldly advanced towards them, until his course was arrested by a ball from the gun of the Serjeant of Marines, that struck him in the fore paw, when he fell, but immediately recovering himself started towards the eastern shore.

The others poured in their fire with effect, and followed up the chase for a considerable time, until the ferocious, but now affrighted animal, sank to rise no more. As the wounds were all in vital parts, this formidable monster had ceased to exist, ere they reached the spot where he lay. During the chase, Bruin, evidently suffering from one of his wounds, paused for a few moments, and with his teeth applied some of his fur, and afterwards snow to the bleeding orifice, which we found still adhering to it, when he fell—a strange instance of their instinctive feeling. Two of the party hastened on board with the intelligence, much elated at their success in killing the first Bear of the season. A sledge party was dispatched and returned in the evening with this great trophy.

We considered him to have been about three parts grown, was in length 6 feet 4 inches, circumference of body 4 feet 10 inches, and weighed five hundred weight. When the skin was removed, there was an entire absence of blubber, as might be expected at that time, as these animals during the winter or season of hypernation, are mainly dependent on the resources which the slow progressive consumption of their own fat can furnish them, until an advancing season enables them to procure their favourite food (Seals) in abundance. The laxity and great capacity of the thick reticular or cellular tissue beneath the skin, afforded ample evidence of its excellent adaptation as a deposit for the winter's supply of blubber. On examining

his stomach, there remained no longer any doubt that the season of fasting had passed, as it was quite distended with portions of the seal, but recently swallowed. The transit of a musket ball, however, through this organ, must have seriously deranged its movements and disturbed the process of digestion then actively going on within its coats. The slaughter of our first Bear, was considered an event of no small importance, and from the number seen at this early period of the season, we felt certain he would not be the last.

On this day, also, the temperature stood below zero for the last time, as it ever afterwards remained steadily above it throughout the season, and we were glad to see the effect of the sun's rays on the ice, as evidenced in the glassy appearance of the hummocks, and the sodden heavy character of the snow. The thaw was very perceptible about the ship, when anything was placed against its dark surface—a thermometer on one occasion so placed showed a temperature of 81°, when that in the shade was only 26° Fahrenheit. The ice appeared to be extensively cracked throughout, the cause of the loud reports frequently heard during the winter, from which we were disposed to predict an early break up.

A Fox caught on the 15th, afforded us still further proof of the advent of summer, for instead of its snow white coat of winter, it had assumed its partially brown summer garb. The snow had nearly dis-

appeared from the neighbouring lands, which again displayed their russet aspect, but in the ravines it remained more or less accumulated throughout the year, and in our excursions we were able to indulge in the luxury of a draught of snow water resulting from the thaw, when toiling weary and exhausted over the land. All our journeys were now performed at night, the sun having last set on the 10th, and it was a truly charming picture to see him coursing above the horizon at midnight, amid the dreary solitude which surrounded us. The dryness of the air on the 17th was such as to enable the men to perform a very important sanitary operation, that of airing bedding—the first time for a long period ; but care should ever be taken that this practice is not had recourse to in a humid atmosphere, as moisture readily becomes deposited, and cannot fail to prove a source of much evil.

The hunting parties returned and brought on board no less than sixty-three Ptarmigan, which, with what we had shot during the week, gave us a good supply of these delicious birds.

The remains of an old Esquimaux encampment were likewise discovered on the western shore ; so that we had now positive evidence of either side of the Strait, having been at one time visited by this migratory race.

CHAPTER XIII.

An unexpected Arrival—Casualties—Results of the Journey—A Bear killed—Strange Discovery—Despatch of a Party—Queen's Birthday—Elucidation of a Mystery—Gulls—A Bear—Discovery of Coal Formation—Return of Travelling Party and Incidents—Esquimaux—A Visit to them—Deer—Hain—Ducks—Return of Captain M'Clure—Results of Travelling—Intelligence received from Esquimaux—Incidents—Frost-bite—Bears—Return of Mr. Wynniatt's Party—Results—Necessity of combined Action—Character of Land—Incidents—Return of Lieutenant Cresswell's Party—Progress of Thaw—State of the Ice—Temperature and Weather.

AT 7 A.M. on the morning of the 20th of May, a party was observed approaching the ship from the northward; and as the intelligence spread, it caused a great amount of anxiety amongst us, as we knew not who they might be, or of what news they might be the bearers. None of our travelling parties being yet due, our surprise was the greater. A fatigue party was at once dispatched to their assistance, and in the course of an hour, while eagerly

watching their movements, we could discern the individual forms of the men; they proved to be the party of Lieutenant Crosswell. About this time we could distinctly see there was an occupant on the sledge; on closer inspection, two were observed, and five in harness dragging it. They soon reached the ship when we became aware of the cause of their return, which the two invalids on the sledge had in a great degree prepared us for. We then learned that they had experienced, during the entire period of their absence, very unfavorable weather, which told severely on the men; that after rounding Point Russell, they proceeded along the north-western coast of Banks' Land for about eighty miles. Then two of the men who for some days had been more or less inefficient for duty, having had their feet and toes severely frost-bitten, which had subsequently become gangrenous, were utterly unable to work at the sledge, or even to walk. Under these circumstances, Lieutenant Crosswell considered it would be imprudent to advance further, and encamped for two days with a view of recruiting his men, and of ascertaining if any improvement would take place in the state of the invalids; but at the end of this period, matters still becoming worse, he determined on returning to the ship. This officer speaks in the highest terms of the patience, fortitude, and heroic endurance of these two brave sufferers, Joseph Pacey, (sail-maker) and Ellis Griffiths, (A.B.,) who, when suffering intensely, still per-

sisted in doing work; and it was only when rendered utterly incapable of walking that they consented to be placed on the sledge. The toil and labour of dragging a heavy sledge with the additional weight of their two disabled messmates, therefore, devolved on the remainder of the party; well and nobly did they acquit themselves, and their care and attention to the invalids deserved the highest praise.

Their state on arrival was truly pitiable. Both were incapable of walking, and had to be carried on board. Facey had his feet and hands so severely frost-bitten as to be quite unable to use either; mortification had set in, in nearly all the toes and fingers. Portions of several were subsequently removed by amputation; and the feet were in such a state, that it was only with the greatest difficulty they were saved.* Griffiths, who was a most excellent man, was similarly, but less severely afflicted; and the removal of some of his toes became necessary. Both suffered much from low, irritative fever; and, from the effects of eating ice and snow ravenously, to allay the burning thirst then present, the mouth and entire of the œsophageal

* This excellent petty officer subsequently served with me in H.M.S. 'Cornwallis' (Captain Wellesley, C.B.), in the Baltic and West Indies. He never entirely recovered the use of his hands and feet, that were particularly influenced by the state of the weather—changes in which he could foretell with the greatest accuracy from the pain and uneasiness he experienced in them.

passage were excoriated and inflamed to a high degree. Some idea may, therefore, be formed of the intense suffering of these brave fellows, from whose lips a murmur never escaped during their trying return journey, where so little could be done to allay the pain and anguish they experienced. The patience and resignation which they subsequently manifested throughout a long course of treatment were such as to call forth the warmest expressions of my admiration. I ascertained that the coast of Banks' Land is formed of a series of cliffs, from 500 to 600 feet high, which, as I subsequently satisfied myself, were of sandstone formation, the trending of which was followed in a north-west direction, outside a line of stupendous ice packed along its base, until its extreme was reached, when a wide expanse of ice was seen, and the land was observed, from a considerable elevation, trending away to the south-west, leaving no doubt of Baring or Banks' Land being an island.

On the 21st, at 10.30 p.m., a large Bear was observed approaching the ship from the southward, following the course of our former visitor. A party was at once sent out to remain in concealment under a neighbouring hummock in the line of his march. Others were posted at the stern under cover of the bulwarks—so that we were determined he should not escape. He steadily advanced, doubtless astonished by the huge black mass before him, and sniffing the tempting odours that filled the air. He had reached within

.

ninety yards of the ship, when Captain M'Clure fired and wounded him in the back. He fell, but got again on his legs. A few of us then sallied forth to assail him more closely. Although the first wound appeared a mortal one, the monster writhed violently, sitting on his haunches, evidently paralysed; when a ball from my gun, passing through his head, laid him lifeless on the ice. No time was lost in removing his skin; and, as this was the largest Bear we had yet seen, it made an admirable specimen. The dimensions were, in length, 7 feet 9 inches, circumference of body 6 feet; his weight was estimated at 700 pounds, but would, of course, have been greater, with his proper casing of blubber, which was then just forming. As it was my custom to have the stomachs of all animals examined, in the hope of obtaining some trace of the object of our search, knowing that they would swallow anything when impelled by hunger, I directed that of this Bear to be opened in my presence. It was distended with water; and, on opening it, I discovered a few raisins, small pieces of pork fat cut irregularly, some tobacco leaves, and two pieces of common adhesive plaster; from their appearance, they had been but recently swallowed, and nothing further was found in the stomach or intestines. That he had evidently got them where civilized man either was or had been, there could exist no doubt; and I immediately made known the result of my examination to Captain M'Clure, who was equally astonished at this strange discovery.

Our first impressions were that our long-lost Consort, the 'Enterprize' might be to the southward—the direction in which the Bear had come; but the perfect state in which the articles were found, led me to express my opinion that they could not have been swallowed more than an hour or two, if even so long; it was, therefore, improbable that she should be within that distance. No further investigation was made into the matter; but it was at once determined to send a party along the south-east coast of Baring Island with twenty days' provisions, in the hope of elucidating this mystery, and of ascertaining if any of our countrymen were on the coast, that we might afford them timely aid and succour. An opinion was entertained that the articles thus discovered might have been thrown from the ship when drifting about the Strait, and then picked up by Bruin on the floe; but as we could not establish the fact, preparations were made for the early despatch of the party. Accordingly, on the 22nd, Lieutenant Crosswell, and the remnant of his former associates, with two fresh hands, were dispatched on this service. Captain M'Clure and myself accompanied him with a strong fatigue party, as far as the Island, when they proceeded on their way.

The 24th of May being the anniversary of the birthday of our most Gracious Queen, the resources of the 'Investigator' were gladly taxed to do it honour; and an ensign was hoisted for the first time since leaving Behring's Strait. At noon a royal salute was fired

with our two guns, and a small mortar—the first, perhaps, that ever resounded within the precincts of the Polar Sea—this followed by three hearty cheers ; and the evening was spent in hilarity by the ship's company, to whom an extra allowance of grog had been issued.

A party who had gone to the islands, in pursuit of two Bears reported to have been seen, returned towards mid-night, with a trophy more acceptable to us than any other success they could have met with—this was a preserved meat tin, one of those used to point out the sledge track. To this they were attracted by following a Bear's track, when they found it capsized, and containing a few articles similar to those found in the Bear's stomach on the 21st, with marks of where the animal had been tossing it about ; thus was solved the mystery which had caused so much conjecture and uneasiness respecting our Consort. It was then too late to recall the party ; but the journey would tend to make our search on either side of the Strait more complete.

Gulls were seen for the first time on the 27th, near the islands, which afforded an indication of water forming, perhaps, to the southward. Two Wolves were likewise seen coursing along from shore to shore across the Strait ; a few of us went in pursuit, but their pace was too rapid to allow of our coming up with them, and we were consequently obliged to retrace our steps to the ship.

Early on the morning of the 28th, a Bear was observed near the ship by the Quarter-master, which we succeeded in killing, but it was smaller than either of the others. The number of these animals seen passing through this Strait, fully confirmed the statement of the Esquimaux, of its being the land of the White Bear.

About this time, during my excursions into the interior of Prince Albert's land, while traversing one of the numerous gorges in which it abounds, I observed several slaty, and dark clay formations on either side, more particularly at the angle of its windings, which were somewhat abrupt—the line of stratification inclining from the horizontal in some places to thirty-five degrees, the dip generally corresponding to that of the land. It was chiefly composed of dark laminated earth and shale; in the substance of the latter, and intervening between its layers, which were easily separated, thin laminæ of coal were discernible, and in some situations, lines of it were observed in the formation at some distance—recognized by its well known lustre. Sulphur in combination with iron was also found, and numerous specimens were obtained. Similar appearances I subsequently observed in other parts of this land; establishing, beyond doubt, the existence of coal, had we only had time and means to procure it.

On the 29th, Lieutenant Haswell and his party arrived from their journey along the south-eastern

coast, in good health — apparently more robust than when they started, for having met with game and driftwood in considerable quantity, they had fared much better than the parties that had gone to the northward, where neither could be procured.

They followed the coast line, which led them into several bays and one or two deep inlets, nearly all of which were explored. They presented in their outline the same general character as other lands in the Polar Sea. On the 14th of May, they reached their turning point in latitude $70^{\circ} 15'$ N. longitude 111° W. on the northern shore of a large inlet, which was subsequently called Prince Albert's Sound. Strange to narrate, ten days later Mr. Rae arrived on the southern coast of the same inlet, about forty miles from where our party had erected their cairn, after exploring the southern coast of Wollaston Land. How important it would have been, had these two parties been fated to meet, as intelligence of our position would have been received in England at the close of the year, on the return of Mr. Rae. Another proof, if any were wanting, to show the necessity of searching expeditions acting in concert, and with a previous knowledge of each other's plan of operations.

On their return, when about eight days journey — (at their rate of travelling) from the ship — and some six or seven miles distant from the coast, they were astonished on finding an Esquimaux encampment on the ice. The approach of the party was conducted

with due caution ; but as the few natives who stood in front of the tents, manifested no signs of hostility, and displayed no weapons, both parties were soon in friendly communication ; this could only be maintained by signs, as none of them knew the language. There were about eighteen people, a very old couple, and four men ; the remainder of various ages of both sexes were then employed catching Seals in the cracks in the ice, which had partially opened out. Being unable to obtain any intelligence of consequence, our men presented them with a few uniform buttons, which they appeared to value highly, and in return received a few very well dressed seal skins. This was the principal event met with by this party in their journey. They gave a favourable report of the state of the ice, and the resources of the land. Pools of water were forming on the former, and on the latter they had seen twenty-four Reindeer, three Musk Oxen, and three animals which were reported to me to be Moosedeer (*Cervus Alces*). As this was the first instance, I believe, of the latter having been seen beyond the American coast, I inquired minutely respecting them from my informant, who was an intelligent young seaman, (Mark Griffiths), and his replies were, in every respect, quite satisfactory. He said that they were identical with the Moosedeer he had seen near the Buckland River, in Russian America, when serving in H.M.S. 'Herald,' and I have no reason whatever for questioning the truth of his statement.

On receiving intelligence of the proximity of the Esquimaux, Captain McClure determined to proceed with the interpreter to their encampment, with a view of obtaining all the information they could give; and at 6 P.M., on the morning of the same day, they started with a sledge and six men, provisioned for twelve days.

On the 31st, a small herd of Deer were observed crossing the Strait. A few of us went out to lay in wait for them, and having, after much trouble taken up a good position, as they were coming within range, the gong on board was incautiously struck at eleven o'clock as usual. No sooner did they hear the sound than they turned and fled precipitately to the shore from whence they had come, and thus destroyed all our hopes of obtaining so valuable a prize.

The first rain of the season fell at this time, but so light as to be barely perceptible. A flock of Pin-tailed Ducks (*Anas Caudacuta*) and also one of Snow Geese (*Anser Hyperboreus*) were seen going to the northward, joyously told us of the advent of summer. Although the weather in the early part of the month had been unusually cold and boisterous for the season, the last few days had in part compensated for its previous severity. Still there was no diminution in the thickness of the ice; the mean of several borings was found to be seven feet, but of a totally different character from its former flinty, adamantine hardness; and was then so disintegrated and softened by the permeation of water, as

to afford easy progress to the boring irons. A considerable quantity of snow fell throughout the month, but now disappeared under the influence of a daily increasing temperature, which ranged from 5° below to 47° above zero, with a mean at $18^{\circ} 89'$ F. Our exertions in the chase continued to be attended with a fair amount of success. Rock and Willow Grouse, a few Hares and Foxes were added to our stock, enabling us to issue one meal of fresh meat once a week. On the evening of the 5th of June, we were much surprised on observing the approach of Captain McClure and party from the southward; and we could scarcely have believed until assured of the fact, that the journey was accomplished in somewhat less than half the time taken in its performance by Lieutenant Haswell—this, however, appeared to answer no other purpose, than that of instituting a comparison at the expense of the men. In justice to the latter officer, it must be stated that from the leisurely mode of travelling adopted, he brought his men on board in a good state of health and efficiency for further service, if necessary. While the party of the former, were so worn out and exhausted, from the rapidity and harassing nature of the march, without sufficient rest, that one half were placed on the sick list on their return—(one of whom was severely frost-bitten)—and the remainder told me that they could not have continued the journey for six hours longer, at the same rate of travelling. This circumstance I adduce to show how little a

display of energy may avail, when unaccompanied by discretion and judgment, and to point out the necessity there exists of exercising both.

They met the tribe of Esquimaux a short distance to the northward of where they had been formerly seen, the latter having a day or two previous removed their tents to new fishing ground. These appeared simple and harmless, the most primitive of their race that had yet been met with, and occupied the most northern position of any seen hitherto or subsequently by us. They said that they belonged to the neighbouring land of Wollaston, and had never seen white men before, until visited by the party of Mr. Haaswell, their only communication being with the neighbouring tribe further inland, with whom they trade—many of them inhabit the land to the eastward. They drew an outline of the coast, by desire, on paper being placed before them for the purpose. On reaching a certain point which they marked, they said that from it, they could see across the Strait, what they designated, the Great Land, meaning that of America, but that none of them had ever visited it. It was laid down quite in accordance with its outline on the chart, and on reaching that point where its continuity was interrupted, the draughtsman stopped, saying he had been no further along the coast. The pencil was then taken up by the wife of the chief, a woman who evinced great quickness and intelligence; and in a very determined, dashing manner, she formed

the coast line of a deep bay—thus filling up the blank then existing on the chart, between Wollaston and Victoria Lands, and establishing their continuity; the accuracy of which was subsequently fully confirmed by the journey of Mr. Rae along that coast. She dropped the pencil on reaching her farthest point of travel, where she said, there were high mountains, and many Esquimaux from whom the tribe received copper in exchange for skins, the metal generally fashioned into implements of war and the chase. Some of our men saw lumps of copper ore lying about the huts, a few of which they picked up and brought on board. It was certainly the purest ore I ever saw, and the natives appeared to think it strange we should think it worth carrying so far. This circumstance was not made known to Captain M^cClure by the men, until some time after their departure. We, consequently, assumed, it came from the mountains of Victoria Land of which they spoke. It is to be regretted that the hurried nature of the visit, which barely amounted to half-an-hour, did not allow fuller enquiry respecting the source from whence it was procured, the character of the people, and of the land they inhabited. Their knives, arrows, needles, and other cutting and piercing instruments were all made of copper—several specimens of which were obtained—fashioned into shape entirely by hammering. No igneous power being had recourse to, it was surprising to see the admirable nature of the work,

considering the means by which it was effected, and the form reflected great credit on their ingenuity and excellence in the adaptation of design.

Our party made them several presents, and much astonished at such liberality, they wished to know what they should give in return, but on being told they were gifts from our chief, they at once presented several copper instruments and skins. They were quite devoid of all that mercenary spirit, and those strong thieving and other propensities so universal amongst the Esquimaux on the American coast—the result of their contact with civilized man—being a few of the evils which invariably follow his footsteps over the world, when antagonized by no controlling power. They were quite ignorant that there existed any other people differing from themselves in manners and customs; and asked our party where they came from, and where their hunting ground was situated. Their entire occupation consisted in hunting and fishing, migrating to and fro along this coast, fixing their temporary abode wherever success was most likely to attend their efforts; and appeared to be influenced by no other feeling than the acquisition of what was essential to their sustenance from one season to another, to afford them sufficient food and raiment for sustaining life and protecting them from the cold. They manifested great consternation on seeing one of the guns discharged to gratify their curiosity; having never seen or heard

anything of the kind before. They were invited to visit the ship, and as their kindness and simplicity excited a great degree of interest, a gun was offered to each of the men who would visit us, and other presents to the women. They promised to come, but perhaps the state of the ice subsequently, prevented them. It is quite deplorable to think of so fine a race as they were represented to be, being so utterly neglected, and existing in a state of such abject heathenism; more particularly when we find the southern boundary of their country within twenty-five miles of the northern limit of the extensive territories of that Company (Hudson's Bay) who obtained and still hold a charter granted to them, that they might be the means of promoting commerce and advancing civilization amongst these wild but interesting people. How far they have succeeded in the former, they probably can tell, but how they have neglected the latter, we have seen.

One of the men of this party, Cornelius Howlett, was brought on board in a very deplorable state, having been frost-bitten in both feet on the night of his departure from the ship, although the temperature was then only two degrees below freezing point. This occurred from his feet becoming benumbed in going through the several pools of water that had formed on the floe; and the canvas boots which he wore being in the first instance rather small, were contracted still more by the wet, impeding free circulation in his

feet by the pressure. On removing them the following morning, when they encamped, the toes of both feet were quite rigid and frost-bitten. To restore warmth to the parts was, of course, the first object, but instead of having recourse to ordinary friction with the hand, directions were most injudiciously given to rub them with concentrated spirits; this produced such violent local reaction, that inflammation set in of such an acute, unhealthy character, mortification ensued. On his arriving on board, I found the toes of the right foot in an advanced state of gangrene, which entailed the necessity of their removal by amputation, together with the great and a portion of the second toe of the other foot, and it was with the utmost difficulty that the three remaining toes were saved. This occurrence was the more to be regretted, for had judicious means been used in the first instance, and ordinary care afterwards, such a result would not have happened. The poor fellow still dragged at the sledge as long as he was able, although the pain he was suffering must have been agonizing; and when at last obliged to forego labour, he had to walk through pools of freezing water and thawing snow, as it was not considered compatible with the rapidity of the journey, that he should be carried on the sledge—hence the sad results I have mentioned.

Several Bears were daily seen making their way to the northward, and were pursued whenever there

appeared any chance of success, by parties of three or four persons ; but whether terrified by our appearance, or influenced by strong instinctive feelings of self-preservation, they never manifested any desire for attack, and seldom could we ever bring them within range of our guns. Three approached the ship quite close on the evening of the 5th, amid the excitement incidental to the unexpected arrival of the travelling party ; after taking a survey they leisurely walked off, when they were pursued by a party of three—by whom one or two of them were wounded—who followed their blood marks on the snow for a considerable distance without success.

Early on the morning of the 7th, the party of Mr. Wynniatt made their appearance from the northward, when a fatigue party was sent out to their assistance. We soon had the pleasure of receiving them on board with three cheers, looking well and in good health after their journey, the last few days of which were rendered unusually harassing from the progress of thaw, and the accumulation of water on the ice. Mr. Wynniatt after rounding Point Peel, found the coast line to trend to the south-east, into a deep inlet, the entrance to which he crossed, still following the coast which then took a north-easterly direction ; this led him into a bay of considerable extent, from which the outline of the land still trended to the east-north-east, in the direction of Cape Walker, until he reached his furthest point on the 24th of May.

Strange to narrate, on the day previous (23rd) a party under Lieutenant Osborn from Captain Austin's expedition, reached within about sixty miles of Mr. Wynniatt's turning point. How important, therefore, it would have been had these officers effected a junction—which they could have done with the greatest ease had they been aware of each other's contiguity. Thus was another chance lost of completing the chain of communication between the eastern and western Expeditions. This is the fourth instance of a similar kind I have narrated, where we have seen parties roaming over the desolate Polar wilds, with a common object in view, reaching within one or two days' travelling of each other, and from ignorance of each others intended operations, and the non-establishment of any preconcerted plan for forming a rendezvous—where if they did not happen to meet, they would at least have left information for each other's guidance—their labours were entirely unproductive. The vital importance of such Expeditions being aware of the relative position of each other, is too obvious to call for further observation. It would not only have rendered the search in every respect more perfect, but would have kept open a communication with England; thereby conveying intelligence of our proceedings, that could not but have been acceptable to a country, which had made, and was making, the most noble and unparalleled efforts in search of her ill-fated sons.

Mr. Wynniatt in his journey discovered no trace of the great object of our search, nor any evidence of man having ever been on the coast. After rounding Point Peel, he informed me the character of the land became bold and rocky—high and precipitous cliffs were met with, of limestone formation; but as he advanced to the eastward, it became low and flat. The ice in Barrow's Strait was chiefly of that year's formation, but in the bays or inlets there were numerous old, heavy floes of stupendous size, which appeared as if never to have moved. The opinion has been advanced by some, that a Strait exists between Points Lock and Willoughby; this I am firmly of opinion is nothing more than an inlet, for it having been my ill fortune to spend my last winter in the ice not far from this locality, drifting in the pack from Melville Islands to near Cape Cockburn, in H.M. Ships 'Resolute' and 'Intrepid,' I found no indication whatever of there having been a *set* of the ice in that direction, as the course of our drift proved, although strong northerly and north-westerly winds prevailed. The assumption, therefore, that the coast line is not there continuous, is I think erroneous, and unsupported by one particle of evidence. This land, presenting a northern aspect, and had a more bleak and desolate appearance than that on either side of the Prince of Wales' Strait; it was still snow-covered with no appearance of thaw, and unvisited by any of the birds or animals which our travellers so plentifully

met with on re-entering the Strait on their return. They saw at various times on the journey no less than thirteen Bears, but as they could not make them in any way available for use, under the circumstances, they were allowed to proceed on their way unmolested.

The shooting parties returned on the evening of the 7th, bringing with them six Ducks, thirteen Hares, twenty-two Ptarmigan, some Golden Plover, (*Charadrius Pluvialis*) and a few Sanderlings, (*Calidris Arenaria*). They reported that the thaw was rapidly progressing, that the ravines and valleys were full of running water, and that the pools collected on the sea-ice were in some places nearly waist deep. The appearance of the men on coming on board bore ample testimony to the exertion they had undergone in dragging the sledge. The boat which was left on the eastern shore in March for the use of the travelling parties being no longer required, all our available men were dispatched early on the morning of the 9th, to bring it on board. This was a work no less difficult than harrassing, from the labour required to drag it through deep pools of water and sludge. The party shot several Ducks, numerous flocks of which they saw. On receipt of this intelligence, I proceeded towards midnight with four companions, in the hope of adding to our stock of game, and perhaps of meeting our absent party from the southward, whose return was then due. We were enabled fully to confirm all the reports that had reached us with respect to the state of the

ice. It was nearly everywhere covered with pools of water, through some of which we waded, and found them nearly waist deep; the cracks were very numerous, conveying the pleasing evidence, that with the presence of the other forces at work for its destruction, a break-up of the ice might be expected at an early period. We had a good night's sport, and considerably enriched our larder with Ducks and Gulls—the latter had collected in considerable numbers on the edges of the rocks, there were three distinct species (*Larus Glaucus*, *Larus Argentatus*, *Larus Tridactylus*). On ascending the summit of the island, we could discern with the aid of the telescope, a small dark moving mass, far distant on the ice, which left no doubt on our minds of its being the gallant little band, whose return we were anxiously looking for.

We immediately retraced our steps to the ship, which we reached about 5 A.M. with the intelligence, when a party was sent out to meet and assist them. About 8 A.M. we had the pleasure of welcoming them on board, all more or less fagged from the hard work they had lately gone through, owing to the state of the ice; and a few of them were subsequently placed on the sick list. Lieutenant Cresswell informed us that they proceeded along the south-western coast of Baring Island, as far as the entrance of the Strait, then westward along its southern coast, rounded Nelson's Head, and finally reached Cape Lambton, from whence they retraced their steps. Near the latter, and

about fifty yards from the beach, they discovered a small fresh-water lake, with driftwood strewn along its edge, having every appearance of its being brought there by tidal influence, although far removed from the usual line of high-water mark, which barely exceeds a rise and fall of two feet. This drift is difficult of explanation, unless caused by the strong westerly winds which generally prevail.

Their report of the state of the ice, and the progress of thaw, was very satisfactory; one crack or opening was met with near Nelson's Head, thirty feet broad, that promised to arrest their progress, until one of Halkett's boats, with which they were provided, enabled them to convey the sledge and all its contents in successive trips across in safety, without loss or casualty of any kind—another instance of the great utility of these admirable contrivances on this kind of service.

All our parties having arrived in safety on board, it was not considered judicious, from the state of the ice, to dispatch shooting parties again to the land, and but little remained to be done to render us ready to take advantage of an early break up. As it was determined to leave the whale boat then at the island, with the dépôt we had formed there, some carpenters went down for three days, to put it in a state of thorough efficiency, and to rebuild the cairn which had partially fallen during the winter. Another detachment, under Mr. Wynniatt, was dispatched to the western shore for the tent, equipage, &c., left

there by the last shooting party. On the 12th, I made my last visit to the island with Mr. Court, when some observations were completed with the theodolite, and we returned in the evening to the ship. They met with numerous adventurous Bear and Seal hunts. Few incidents of consequence occurred for the remainder of the month. We could not leave the ship, owing to the state of the ice. The men were employed in making the necessary preparations for sea in sails, rigging, &c., and we watched with daily increasing interest and anxiety the progress of that thaw which was ultimately to liberate us from our icy prison.

The summer solstice came, when the sun again commenced his southerly course; but it is some time after his departure, before we are able to take advantage of what his power has effected—generally not until he has made his appearance once more in the region of the Antarctic zone. Thus we remained in listless inactivity, tantalized by the sight of numerous flocks of Ducks and Geese flying to and fro to those secluded retreats where their eggs are deposited, and young brought forth safe from all daring intruders; but cheered by the slow, yet certain destructive power that was being wrought on the ice around us. Many familiar pinnacles and hummocks that for months we had been accustomed to gaze on, gradually diminished, ceased to be familiar, and ultimately faded from our view.

Each officer and man was ordered to have a knapsack containing a change of warm clothing, to meet any sudden emergency. All were, therefore, in readiness for a hasty departure, should untoward circumstances render it necessary.

On the 30th, the ice had entirely thawed from the ship's side, and she floated in a dock of nature's own formation. In the evening, the line of the tide gauge was suddenly drawn out several feet, which was attributable to some slight movement in the ice; and we hailed it with pleasure as the first, although slight, motion that had yet been observed.

The weather, throughout the entire month of June, was very favourable for breaking up the ice. The temperature ranged from 17° to 53° F. The latter proved, the highest registered during the summer; it was on the 8th, and the mean of the month was 36.08 . Strong winds prevailed from west and south-west, and for the few last days of the month, from the north-east, which exercised a powerful effect in setting the ice in motion at an earlier period than we subsequently experienced elsewhere.

